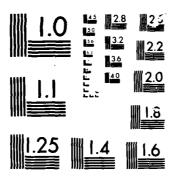
ND-R167 479 OCEAN CONSTRUCTION PLATFORM SEACON TRIM AND STABILITY STUDY(U) NAVAL FACILITIES ENGINEERING COMMAND MASHINGTON DC CHESAPPERKE DIV 93 HAV 98 F/G 13/10 NL



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# OCEAN CONSTRUCTION PLATFORM "SEACON"

# TRIM & STABILITY STUDY

PREPARED BY: J. J. HENRY CO. INC. 3-1-75

UPDATED BY:
GIANNOTTI & ASSOC., INC.
3-5-80

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4. PERFORMING ORGANIZATION REPORT NUMBER	5. MONITORING ORGANIZATION REPORT # FPO 8026
6a. NAME OF PERFORM. ORG. 6b. OFFICE SYM J.J. Henry Co. Inc. updated by Giannotti & Assoc.	7a. NAME OF MONITORING ORGANIZATION Ocean Engineering & Construction Project Office CHESNAVFACENGCOM
6c. ADDRESS (City, State, and Zip Code)	7b. ADDRESS (City, State, and Zip) BLDG. 212, Washington Navy Yard Washington, D.C. 20374-2121
8a. NAME OF FUNDING ORG. 8b. OFFICE SYM	9. PROCUREMENT INSTRUMENT INDENT #
8c. ADDRESS (City, State & Zip)	10. SOURCE OF FUNDING NUMBERS PROGRAM PROJECT TASK WORK UNIT ELEMENT # # ACCESS #
11. TITLE (Including Security Classificati Ocean Construction Platform "Seacon" Trim	
12. PERSONAL AUTHOR(S)	
13a. TYPE OF REPORT 13b. TIME COVERED FROM TO	14. DATE OF REP. (YYMMDD) 15. PAGES - 80-03-05
16. SUPPLEMENTARY NOTATION	
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19. ABSTRACT (Continue on reverse if necessary update of the trim and stability study (Seacon) performed 3-1-75 has been updated new GM was arrived at by calculating all a performed on the ship since the first study 20. DISTRIBUTION/AVAILABILITY OF ABSTRACT	of the Ocean Construction Platform I and is included in this report. A additions, removals and changes Iy. A list of these changes (Con't)
SAME AS RPT.  22a. NAME OF RESPONSIBLE INDIVIDUAL	22b. TELEPHONE 22c. OFFICE SYMBOL
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is included in the appendix. Y

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BLANK LOADING CONDITION FORMS	

### INTRODUCTION

An update of the trim and stability study of the Ocean Construction Platform "Seacon" performed 3-1-75 has been updated and is included in this report. A new 6M was arrived at by calculating all additions, removals and changes performed on the ship since the first study.

A list of these changes is included in the appendix.

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J. J. HENRY CO., INC.

Naval Architects and Marine Engineers

TRIM & STAPILITY

OF COMPANY NAVAL ENGINEERING COMMAND

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# REVISIONS

- 4-4-75
- 1. LIGHT SHIP WEIGHT HAS BEEN REVISED TO INCLUDE STRAPS ON DECK AND BOTTOM DUE TO SECTION HODULUS REQUIREMENT, RELOCATION OF AFT PROPULSION UNITS TO FR 26 AND INSTALLATION OF TWO ANTIROLLING TKS.
- 2. TANK CAPACITIES WERE HODIFIED TO SUIT PROPULSION RELOCATION AND ANTIROLLING TANKS ARRANCEMENT. SLUDGE TANK IS EXTENDED FROM FR 14 to FR 151/2 (P).
- 3. TRIM & STABILITY AND CURVES OF STATICAL STABILITY WERE REVISED ACCORDINGLY TO REFLECT THE ABOVE CHANGES.

Copy available to DTIC does not permit fully

J. J. HENRY CO., INC.

Naval Architects and Marine Engineers

J.O. NO. 1736 SHEET NO. 2 OF DATE 4-4-75

TRIM & STABILITY

# NOTES:

- ARE CALCULATED BY COMPUTER BASED ON THE INPUT TAKEN FROM LINES PLAN (REF. 3) AFTER CORRECTED FOR CENTRAL WELL AND SKEGS.
- 2. CURVES OF STATICAL STABILITY WERE CALCULATED BY COMPUTER USING "SHIP CHARACTERISTICS NAVY'S PROGRAM", AFTER DISPLACEMENT AND CENTERS OF GRAVITY HAVE BEEN CORRECTED FOR WELL.

# REFERENCES:

1. DWG, No. 1736-100-1

GENERAL ARRONGEHENT

5. DMC. No. 1136-100.5

GENERAL ARRANGEHENT

3. YF 614- 50500 - 480780 ALT. 5

LINES & CORRECTED OFFSETS.

## Naval Architects and Marine Engineers

NAVAL ENGINEERING COMMAND

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CONDITION

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#### SUMMARY CONDITIONS OF

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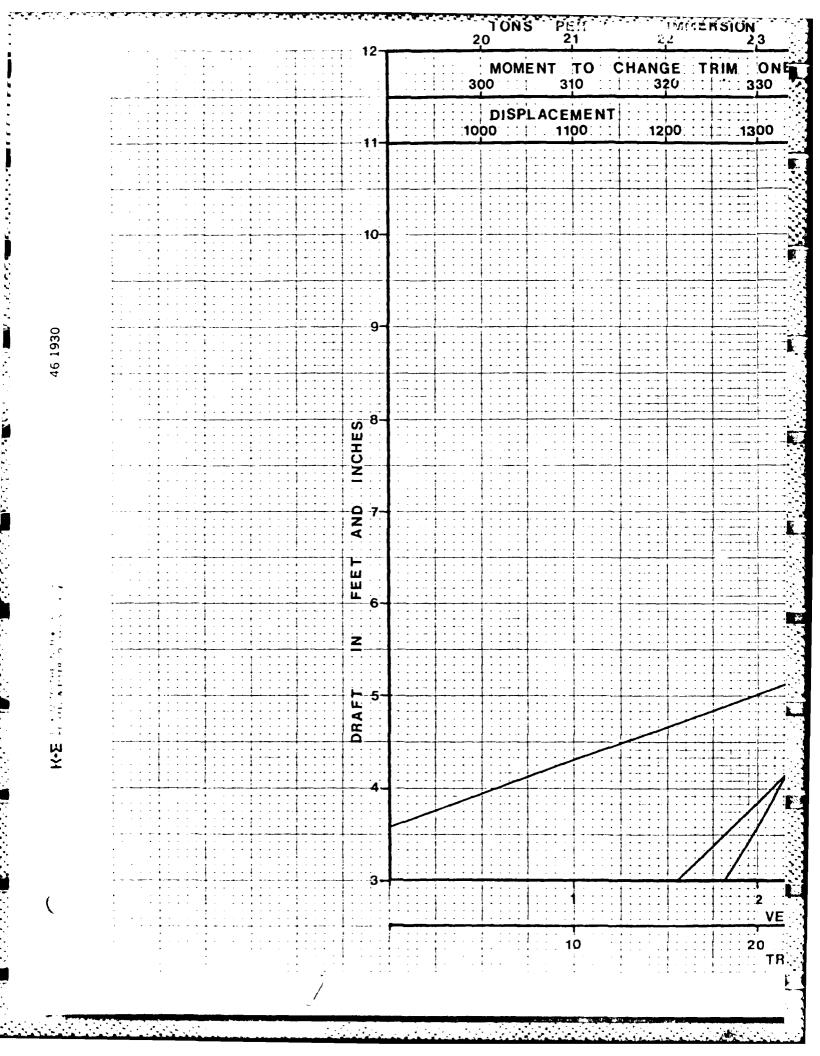
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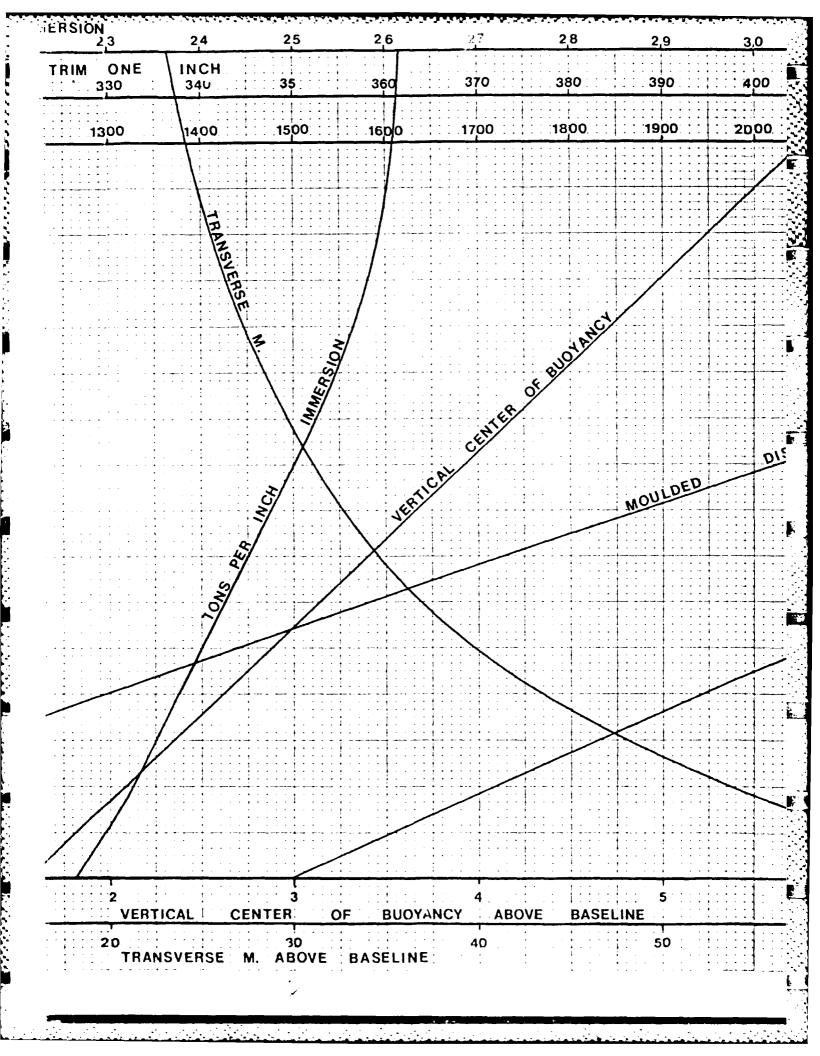
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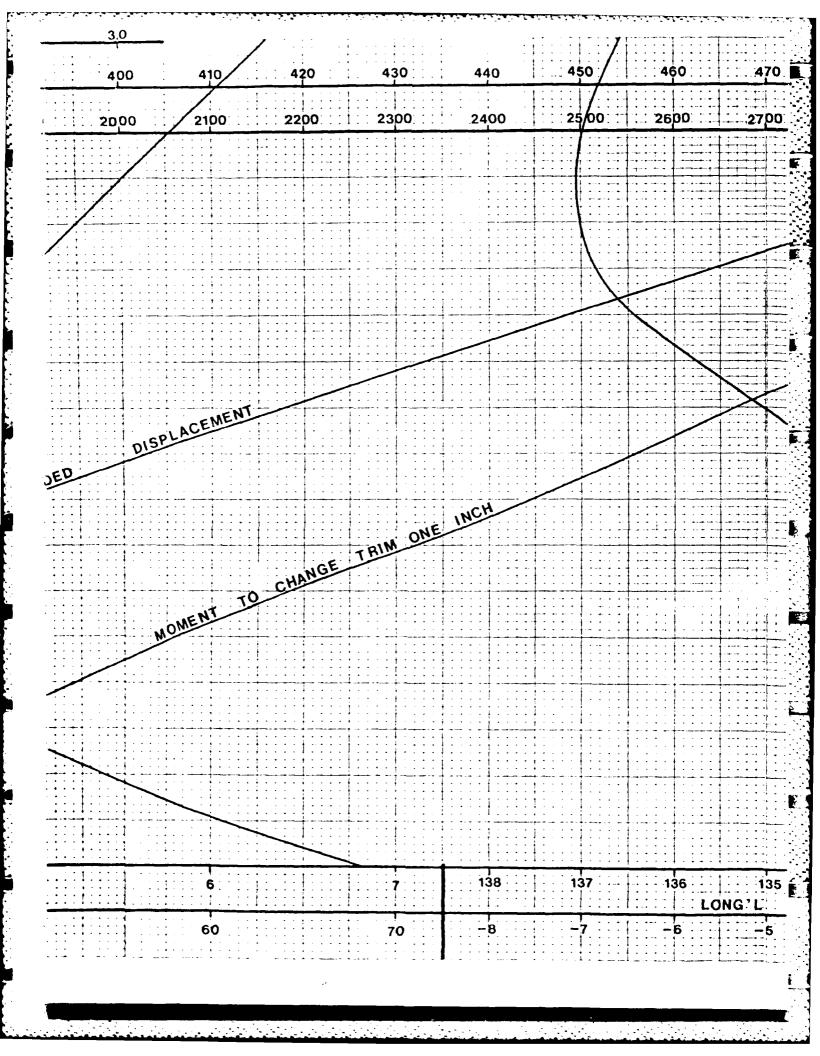
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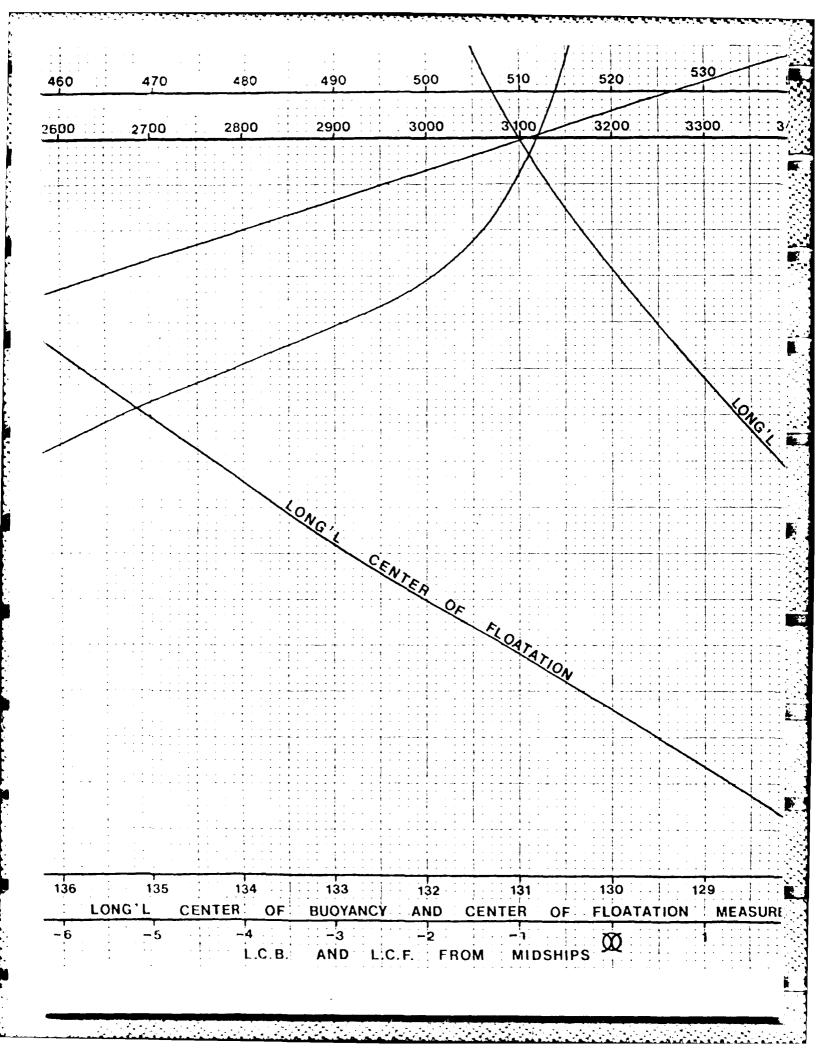
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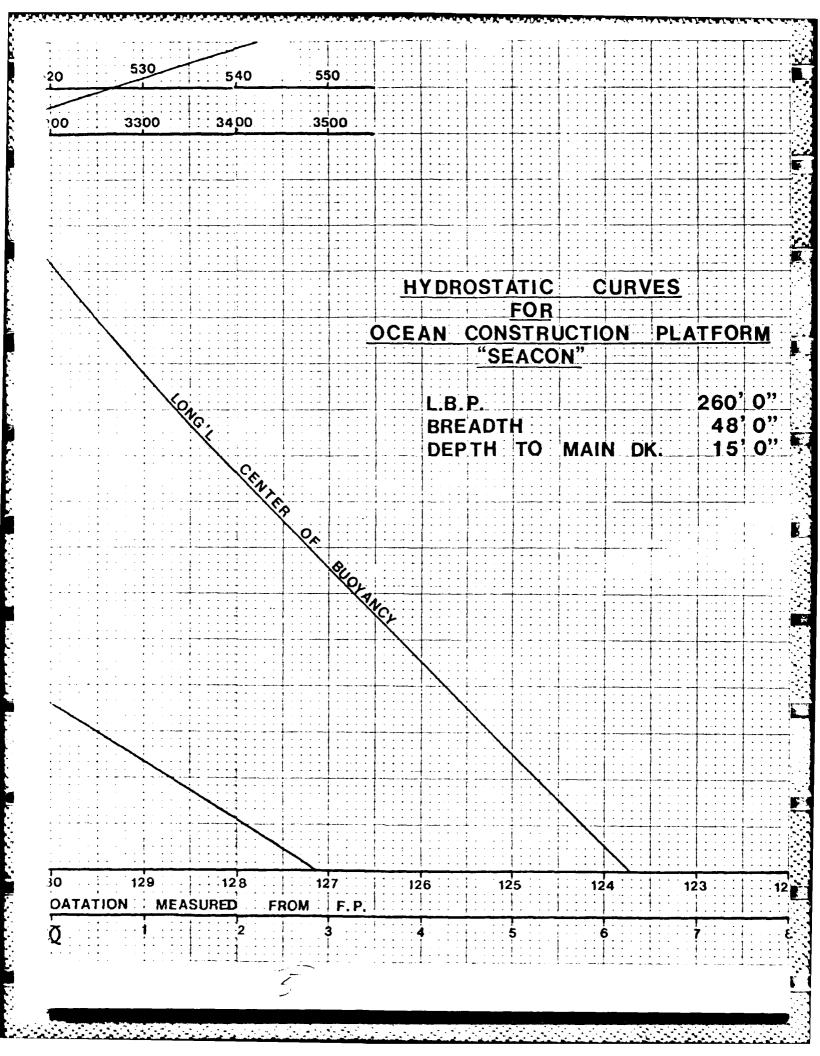
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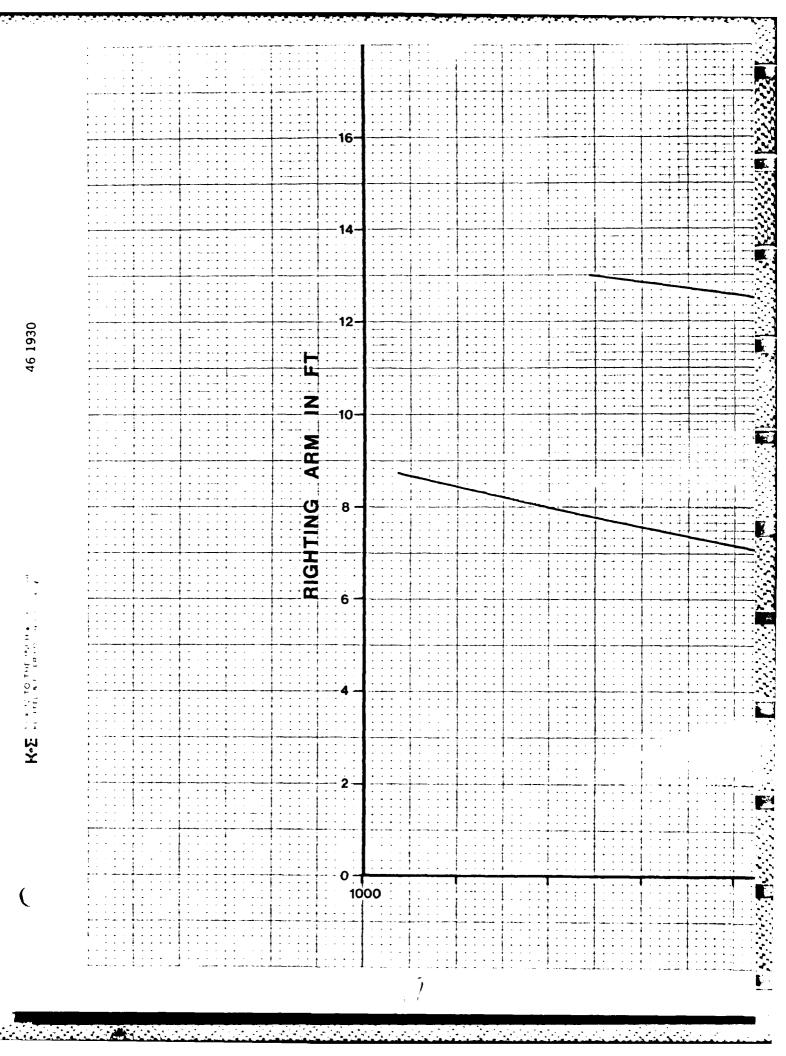


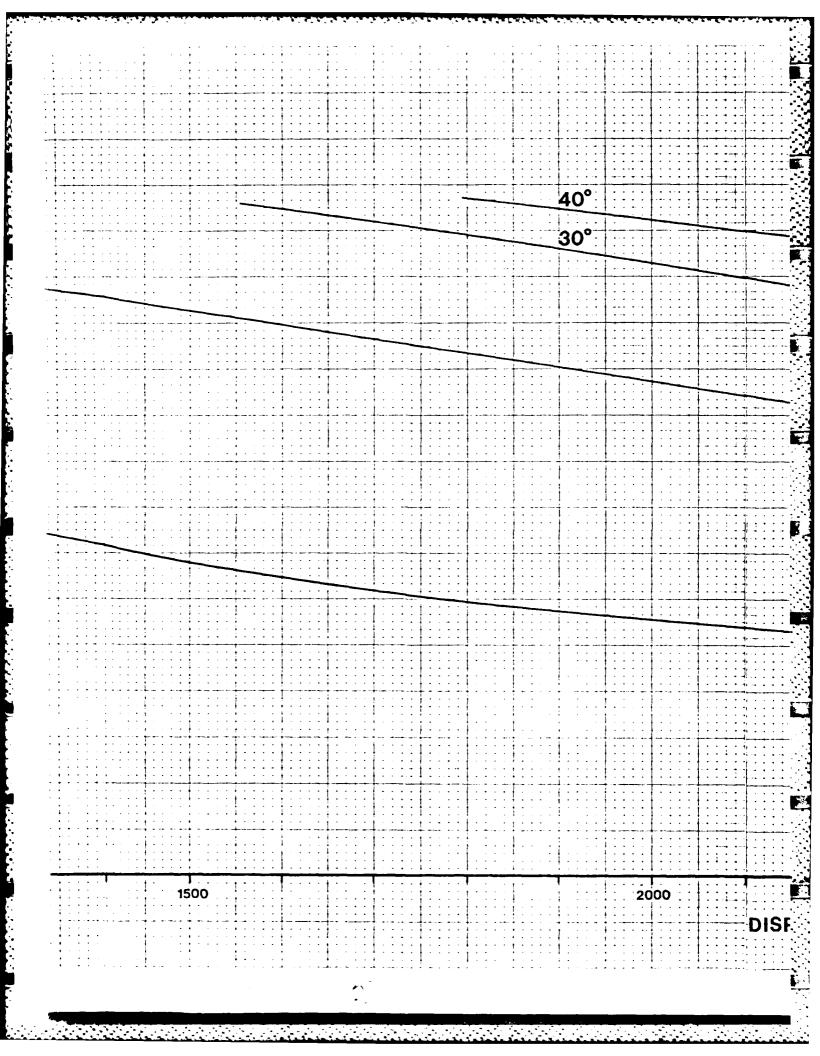


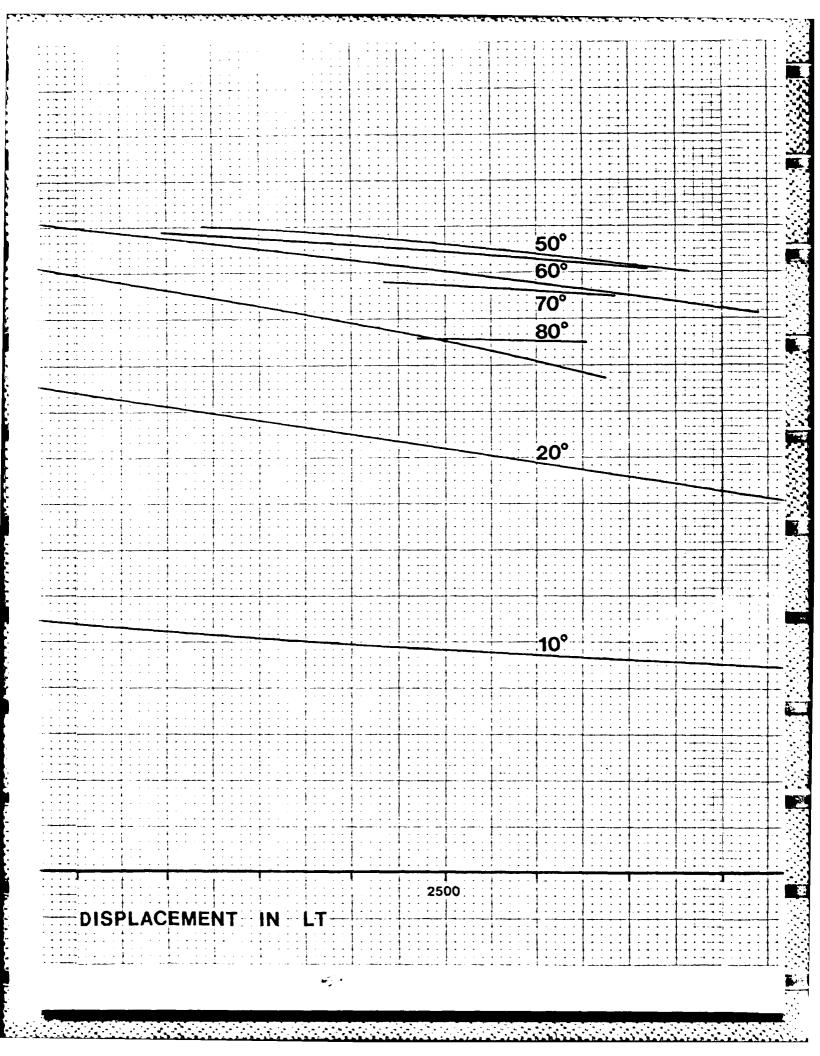


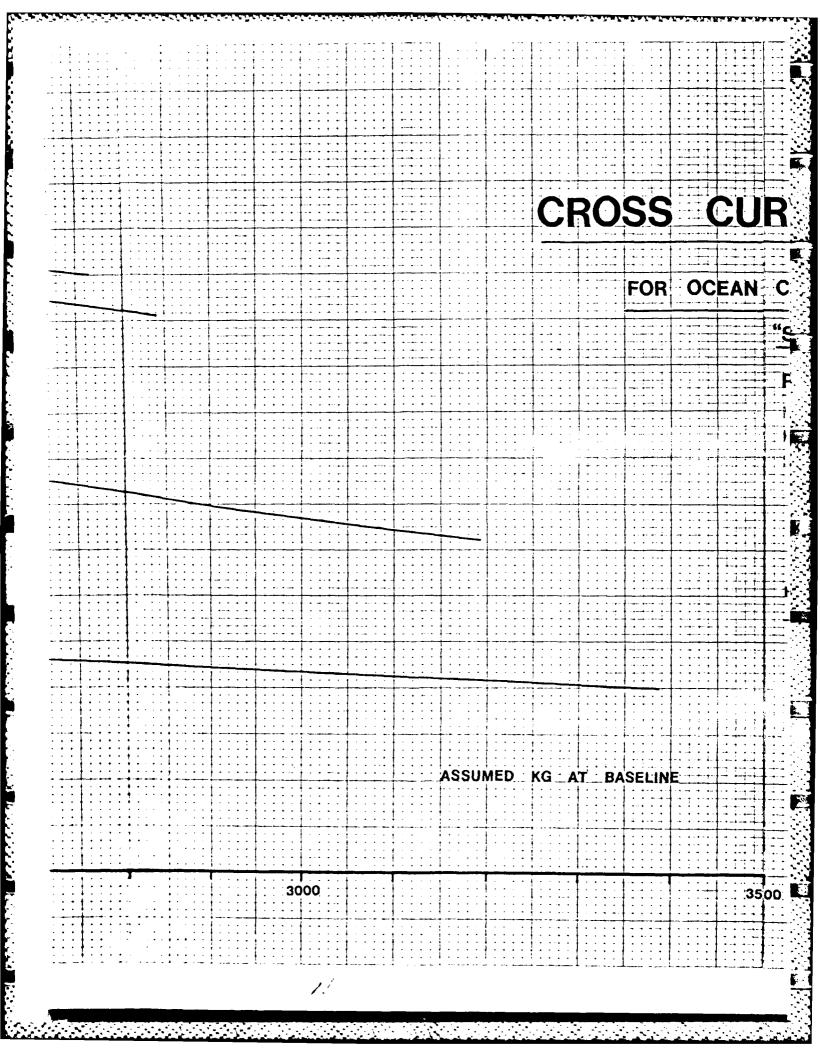


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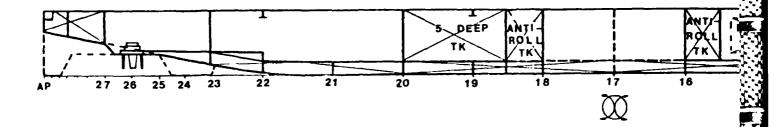


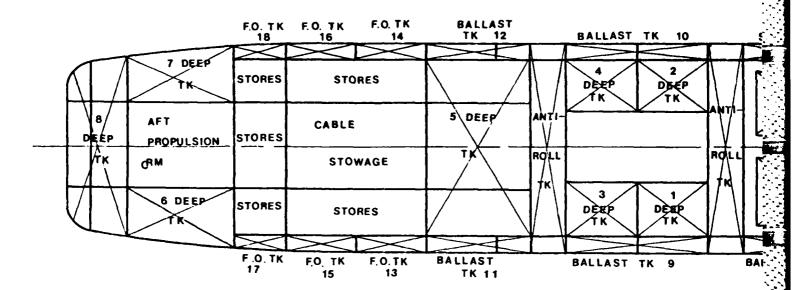


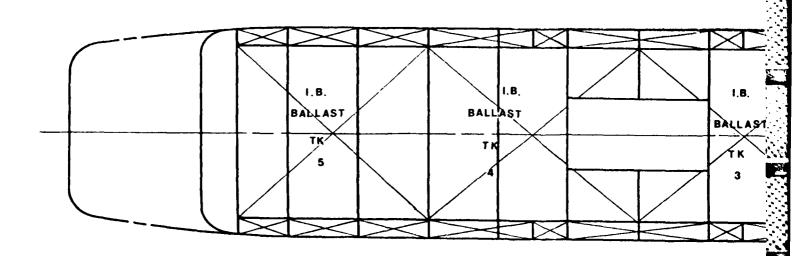


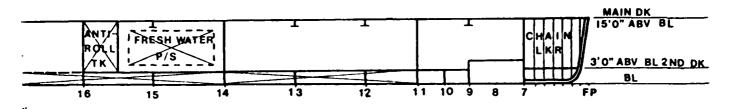


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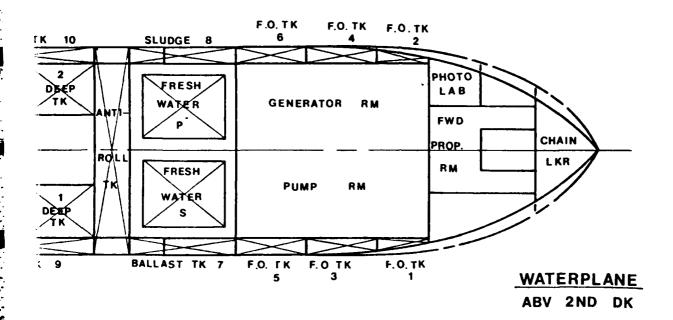


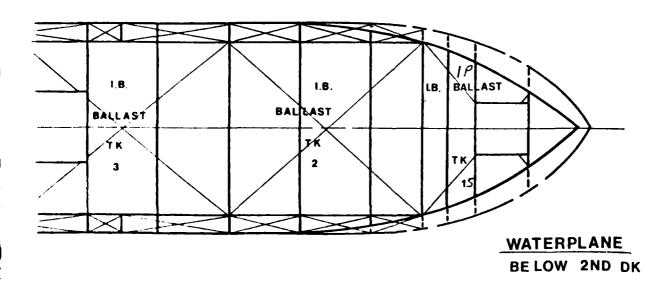






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PROFILE

# OCEAN CONSTRUCTION PLATFORM "SEACON"

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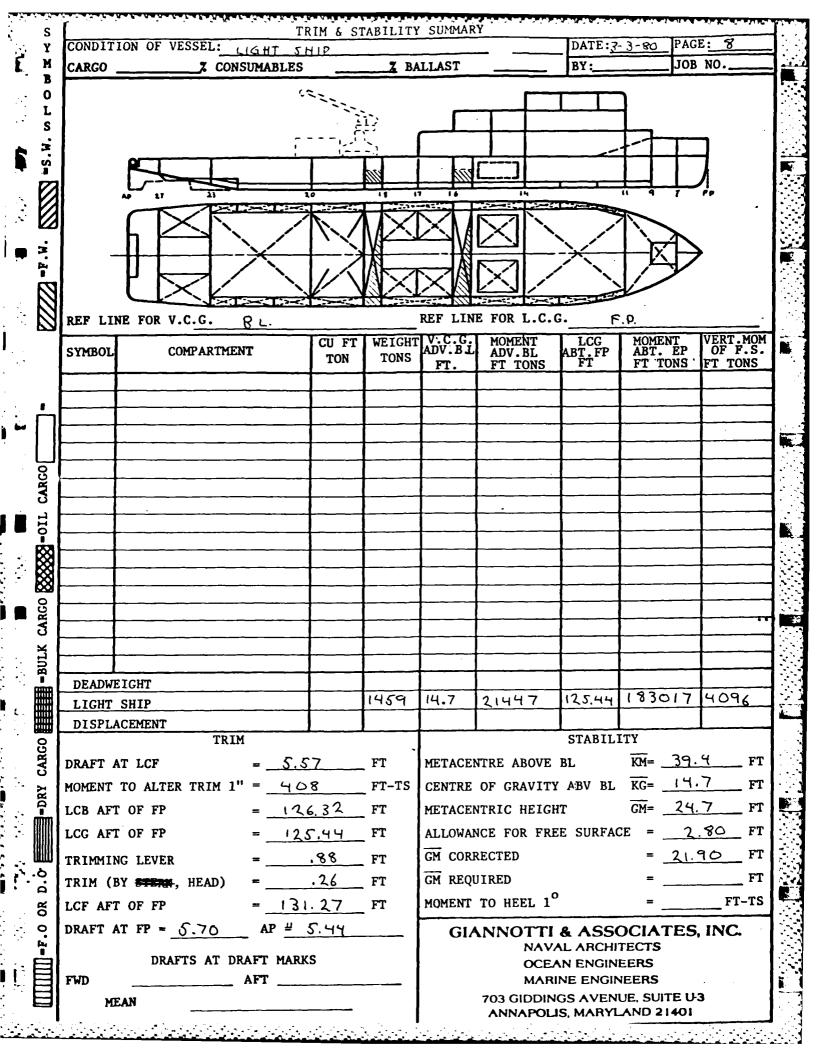
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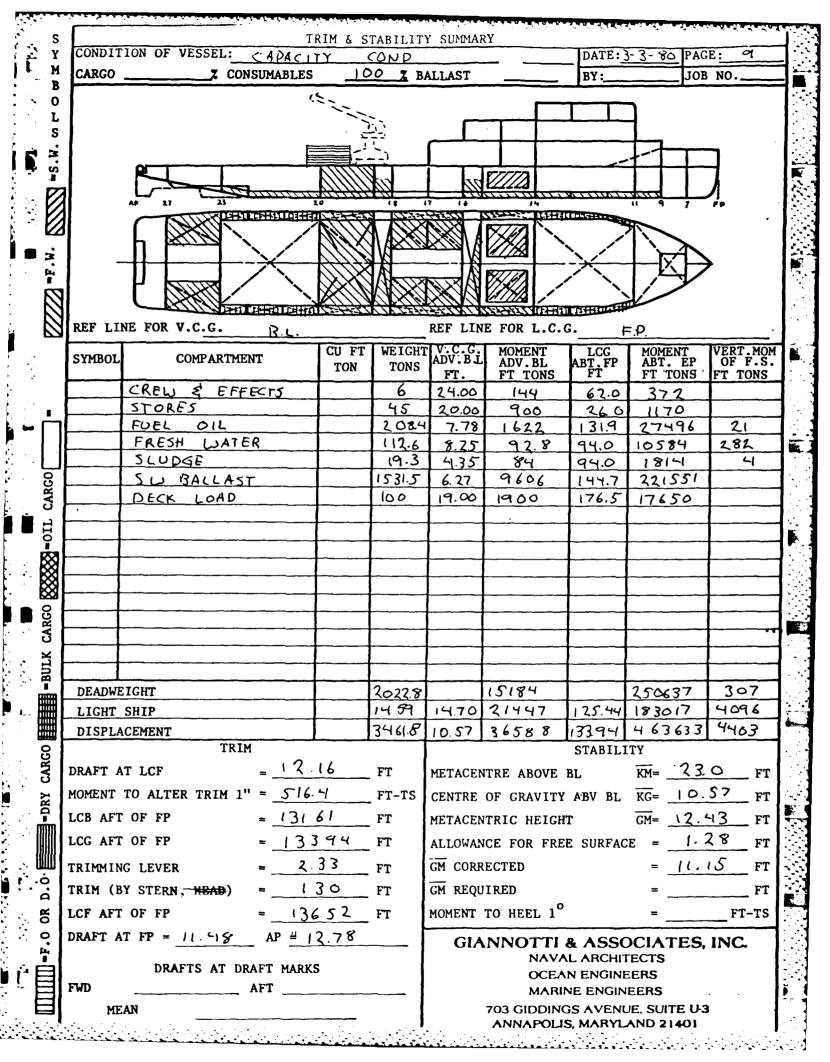
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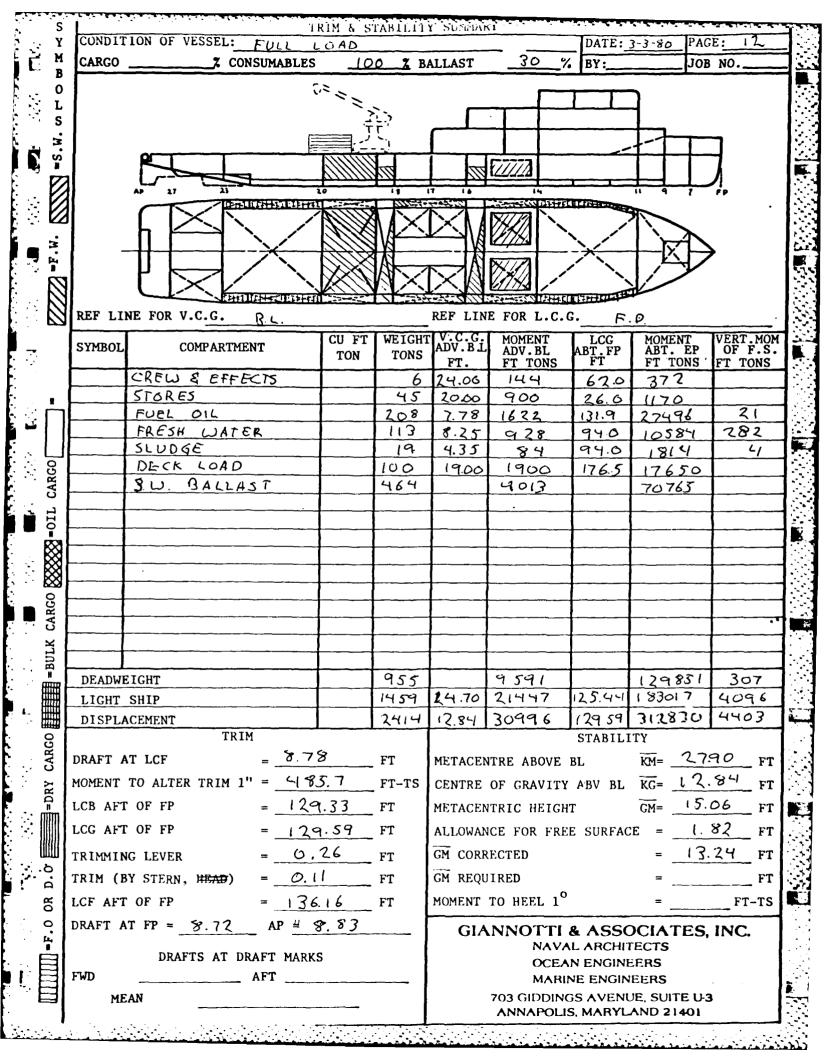
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14	(P)_	12-13		19.3	7.64	147	58.0	1117	2
*5	(3)	13-14		21.0	7.64	160	74.0	1.554	2
*6	<i>(P)</i>	13~14		21.0	7.64	160	74.0	1554	<u></u>
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¥14	(P)	20~21		12.8	6.28	80	188.6	2414	
415	(5)	21-22		21.0	7.60	160	202.0	4242	ع
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*17	(5)	22-23		14.7	7.64	112	216.0	3175	
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LUB. OIL	(98%)								
			39						
SLUDGE	TK (100%)	14-15%		38.6	7.80	30/	94.0	3628	4
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r.8	(P)	16~18		48.1	7.50	375	/30.0	<i>6253</i>	5
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<i>"10</i>	(P)	137~10		33.6	720	301	166.0	6408	4
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i; HOLL)	TK (3)	16~17		64.5	9.00	59/	12.2.0	7869	6,6
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75	(1)	15%-20		529.1	9.00	2162	166.0	316:1	3657
167		23~.77		<u> </u>	13.50	<i>£</i> 33	232.1	19354	157
71.	(P)	23~27		83.3	10.00	<i>5</i> 33	232.7	19334	157
50870				15.4%.5	6.27	<i>460</i> 6	159.65	221551	.12.9.12
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Chylicity COND J. J. HENRY CO. INC. COMPARTMENT CAPACITIES DATE -/-2- 75 PAGE 10 REF. LINE FOR V.C.G. B. L. JOB NO. 1/-REF. LINE FOR L.C.G. HOMENT VERT. NOM. L.C.G. HOUENT Y. C.G. WEIGHT CAP. ABT. F.P. AEV. DL. COMPARTMENT FR. ABV. CL ABT. F.P. OF F.S. TONS CU FT. FT. TOHS FT. TONS FT. FT. FT. T0:43 (98%) FUEL OLL 497 9.80 44.0 \* TK 11-12 11.3 111 WILLS (ح) ¥2 4 (P) 19.3 **\***3 58.0 1119 12-13 7.64 147 (5) 44 (P) 1 160 1554 \$5 21.0 74.0 13-14 (5) **\***6 (P)ŧ 18.6.0 3006 (5) 20-21 413 6.28 80 (P.) 1 12.8 *188.*6 2414 \*14 7.60 160 202.0 1242 #15 ટા-ટર 21.0 (3) ¥16 (P) ¥ ŧ 1 4 112 7.64 216.0 3175 \*17 14.7 22-23 (2) ¥18 (P) 1 1622 131.9 27496 208.4 7.78 TOTAL SUR FRESH WATER (100%) 56.3 8.25 464 94.0 5292 141 15) 15 TK T.W (P) 112.6 8.25 928 94.0 10584 282 SUR TOTAL LUB OIL TK. (98%) 193 940 SLUDSE TK. (50%) 14-15% 4.35 29 1314 S.W RALLAST (100%) z9.8 7-11 1327 21 45.2 2.48 DB TK 112 5550 117 1020 1.55 229 60.0 11-14 7/3 1037 19.124 136.6 205 12-17 1.50 \*4 205 156.6 21342 17-20 136.6 1.50 \*5 71005 49.0. 250 201.4 20-23 2.51 920 \*7 (3) 38.6 <u>3628</u> 14-15% 7.80 301 WING TK 375 130.0 181 6253 ×8 (P) 14-18 79 (5) - **†** ¥ 1 166.0 6003 \*/0 18%-20 3£.6 301 1P) 111 (5) 4 581 7819 HOLD TK (5) 645 9.00 122.0 16-17 712 (P) 8901 ₹/3 138.0 17-18 (5) 1.1 (P) 1 329.1 2463 166,0 53631 1 15:2-20 × 5 (c^) 157 10.00 23.3 833 232.1 19334 23-27 (5) 476. (P) 1 111.66 22/55 1531.5 6.27 9606 SUP TOTAL

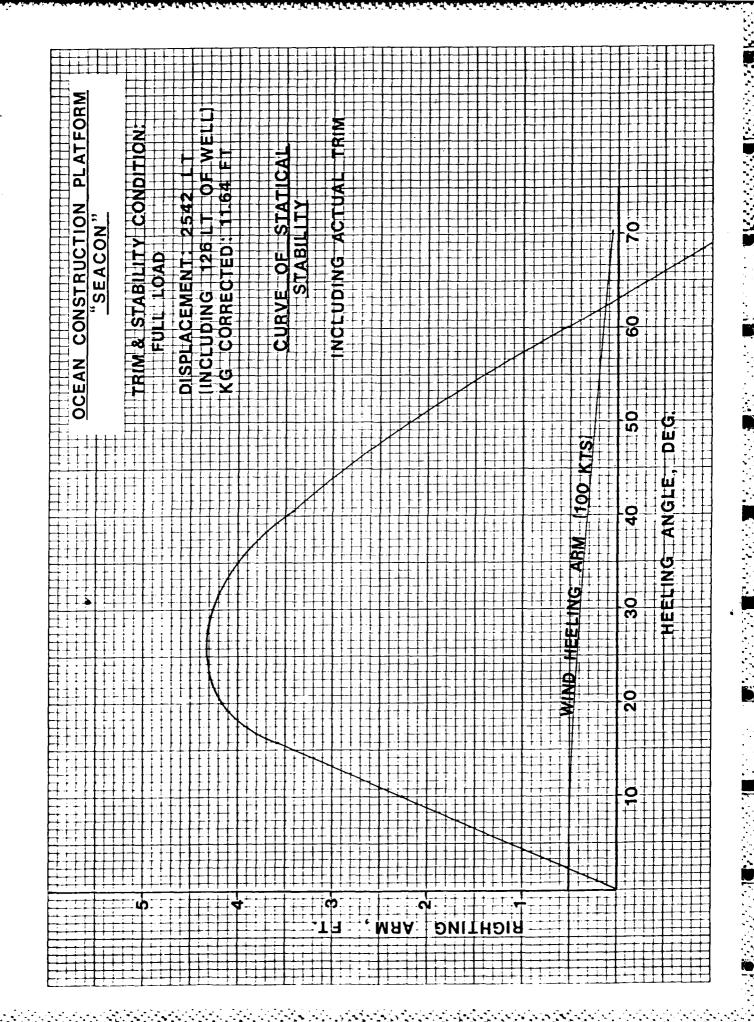


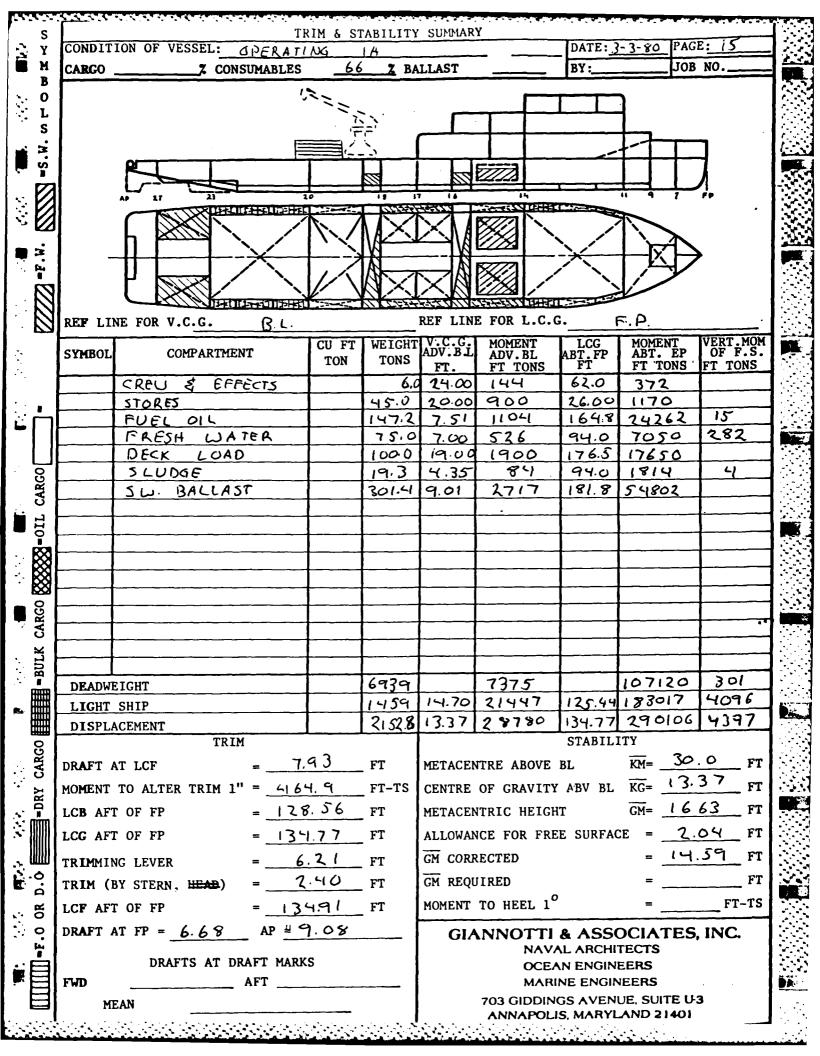
# COMPARTMENT CAPACITIES

J. J. HENRY CO. INC.

DATE 4-2-75 PAGE 13
BY YEG JON NO. 1736

REF. LINE FOR V.	c.o. B.L		REF. LINI	FOR L.C.	6. <u>F</u>	. P	8Y Y	26 10	1 NO. 1736	Ţ
COMPART		FR.	CAP.	EEIGHT TONS	V. C.G. ABV. BL. FT.	MOMENT	L.C.G. ADT, F.P. FT.		VERT. MOM. OF F.S. FT. TOMS	
FUEL OIL	(98%)									
I WING	TK (5)	11-12		11.3	9.80	111	44.0	497	1	
¥2 1	(4)	11-12		11.3	9.30	111	44.0	497	1	•
<b>"</b> 3	(5)	12-13		19.3	7.64	147	58,0	1119	2	
4	(9)	12-13		19.3	7.64		58.0	1119	2	
*5	(5)	13-14	ļ	21,0	7.64	160	74.0	1554	2	٠
*6	(f)	13-14		21,0	7.64			1554	2	Ļ
213	(5)	20-21		21.0	7.54		186.0	3906	2	
= 14	<u>(P)</u>	50-51		12.9	6.28		183.6	2414	11	
<sup>14</sup> 15		21-22		21.0	7.60		202.0	4242	2	-
1316		21-22		21.0	7.60		202.0	4242	2	<u>ٺ</u>
217		72-23		14.7	7.64		216.0	3175	2	L
218 8	(9)	55-53	·	14.7	7.64	112	216.0	3175	2	•
	4.1			208.4	778	1622	131 9	27496	21	
SUB TOT	AL			200.4	1.18	1066		214 10		
FRESH WA	TER TOSS									•
<b>E.W.</b> TK.	(2)	15		_5%,3	3.25	464	94.0	529.2	141	
F.W. 7K.	(P)	15		5G.3	3.25	464	94.0	529.2	141	
						929	94.0	10524	222	
SUB TO	TA L		<u></u>	112.6	3.25	745	94.0	10584	282	Ř,
										<u> </u>
SLUDGE T	K. 50% P	14-15/2		19.3	4.35	84	94.0	1914	4.	
1										
}					·					
5.W. BALL										
FT WING T		14-15%		33,6			94.0	3628		
÷A		16-13		48.1	7.30		130.0	2723	<del></del> ;	
20 4		18-13		43.1			130.0	6253		
75 HOLD T	K. C.	13/2-20		329.1	0.00	<u> </u>	166.0	54631		<u>.</u>
5.35				463.9		4013		7.0765		-
SUB TOTA	٧ـــــــــــــــــــــــــــــــــــــ			465.5		4013		.0165	<del></del> .	•
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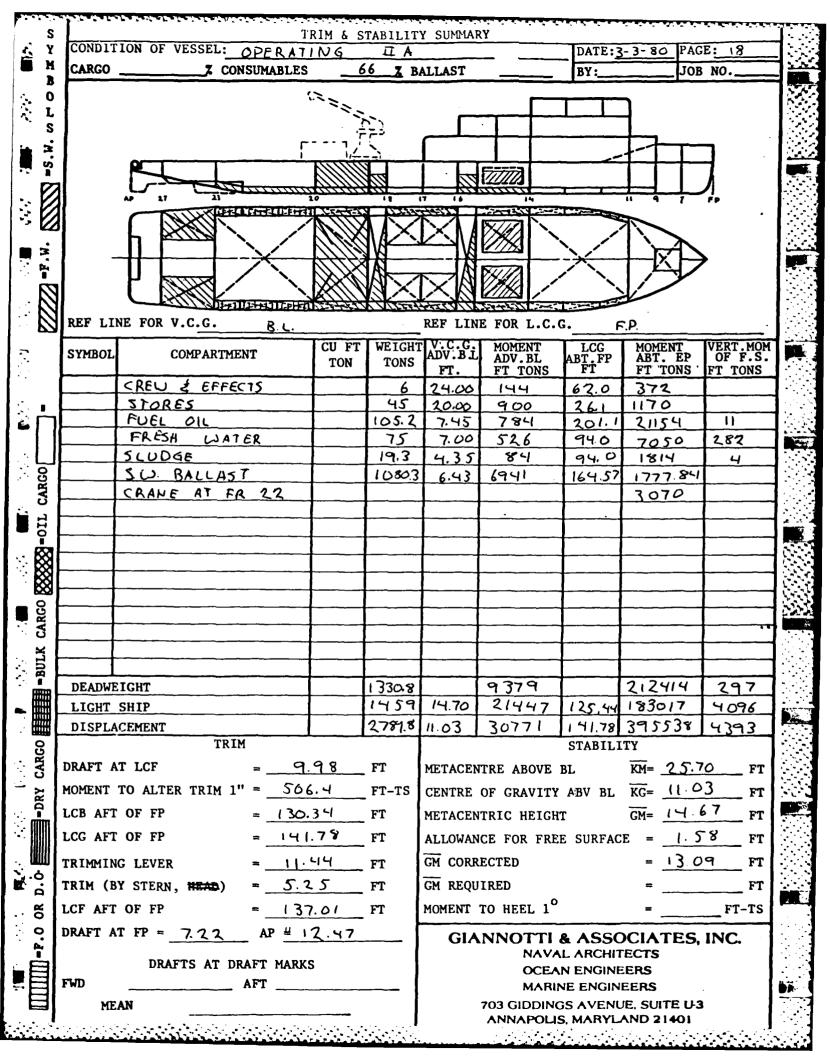


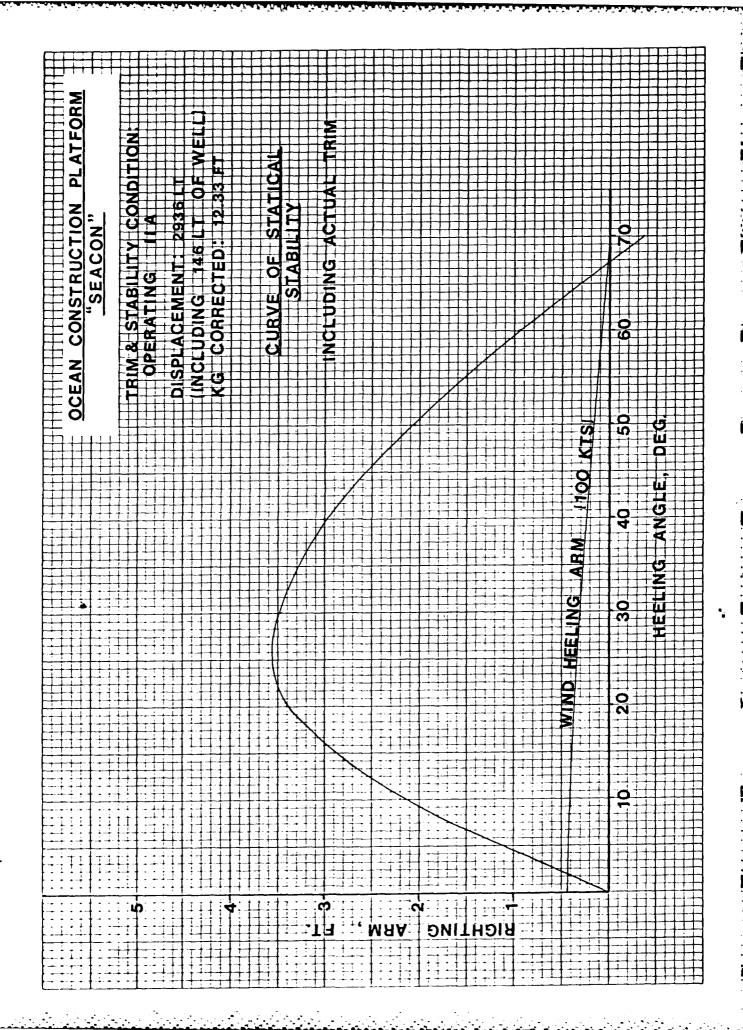


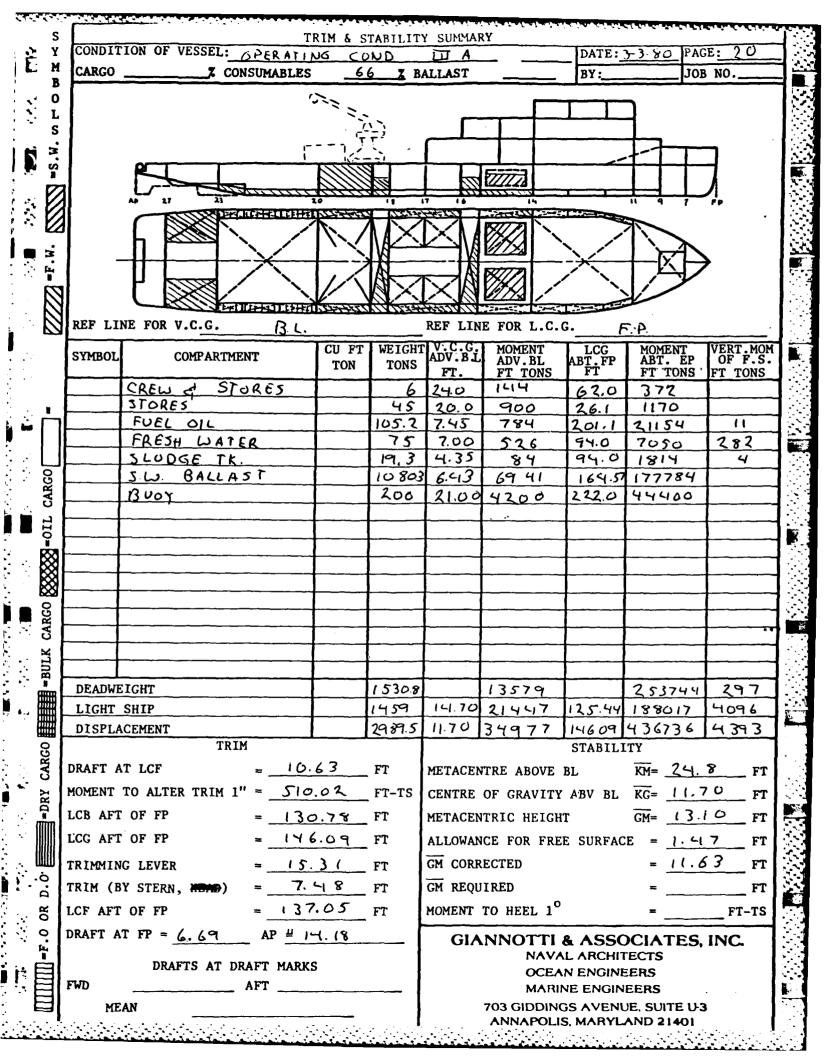
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COMPAR'							1-2-75 PA	
REF. LINE FOR V.C.Q. B.L.		REF. LIM	WEIGHT	V. C.G.	MOHENT	DY	MOMENT	
COMPARTMENT	FR.	CU FT.	TOHS	ADV. CL. FT.	ABV. BL. FT. TOKS	ACT. F.P. FT.	ABT. F.P. FT. TONS	01   F1
FUEL OIL 165%	,	<b></b>	<del> </del>				· · · · · · · · · · · · · · · · · · ·	+
#5 WING TK (S)		f	21.0	7.64	160	74.0	1554	
*6 1 (P)	1					1		
*/3 (s)	20-21		1	1	4 .	186.0	3906	
₹14 (P)	1 1		12.8	6.82	80	183.6	2414	1_
×15 (5)	2/-22		21.0	7.60	160	202.0	4242	<del></del>
*16 (P)	1		1		1	1	1	↓
*17 (5)	22-33		14.7	7.64	112	216.0	3175	1_
*18 (p)	1		1_1_	1 1		1	1	<del> </del>
SUB TOTAL			147.2	7.51	1104	169,8	24262	ـــــ
	4		<b> </b>	<b> </b>			· · · · · · · · · · · · · · · · · · ·	<del> </del>
ESTAL WATER (CIT				<del>                                     </del>	<del></del>	<del> </del> -		╂
FRESH WATER ( 66%			<del>- 55</del>	700	263	000	>55	+-
F.W. TK (S)	5	<u> </u>	37.5	7.00	<u> 76.2</u>	94.0	3525	╂
SUB TOTAL	-		75.0	7,00	526	94.0	7050	╁
SUN TOIRE			75.0	7.00		74.0	7,55	1
S.W BALLAST						610	3/3/	
*7 WING TK (S)	<del></del>		33.6	7.8!	<u> 30/</u>	94.0	3628	<del> </del>
*8 WING TK (P)			43.1	7.81	375	130.0	6253	+-
*9 1 (5)			<u>'</u>	1		<del>  </del>		+-
#6 HOLD TK (P)	23-27		83.3	19.00	<i>833</i>	232.1	19334	+-
$*7$ $\bullet$ (S)	163-61		<u>∪</u> ⊃.⊃	10.00	<u> </u>	1.26.7	11224	1
SUB TOTAL	<del>  '-</del>		301.4	901	2717	181.8	54802	1
30/3 /3///2	1		00/17	1.5		<u> </u>		
SLUDGE TK (50%	14-15%		19.3	4.35	84	44.0	1814	
	1		· · · · · ·				····	
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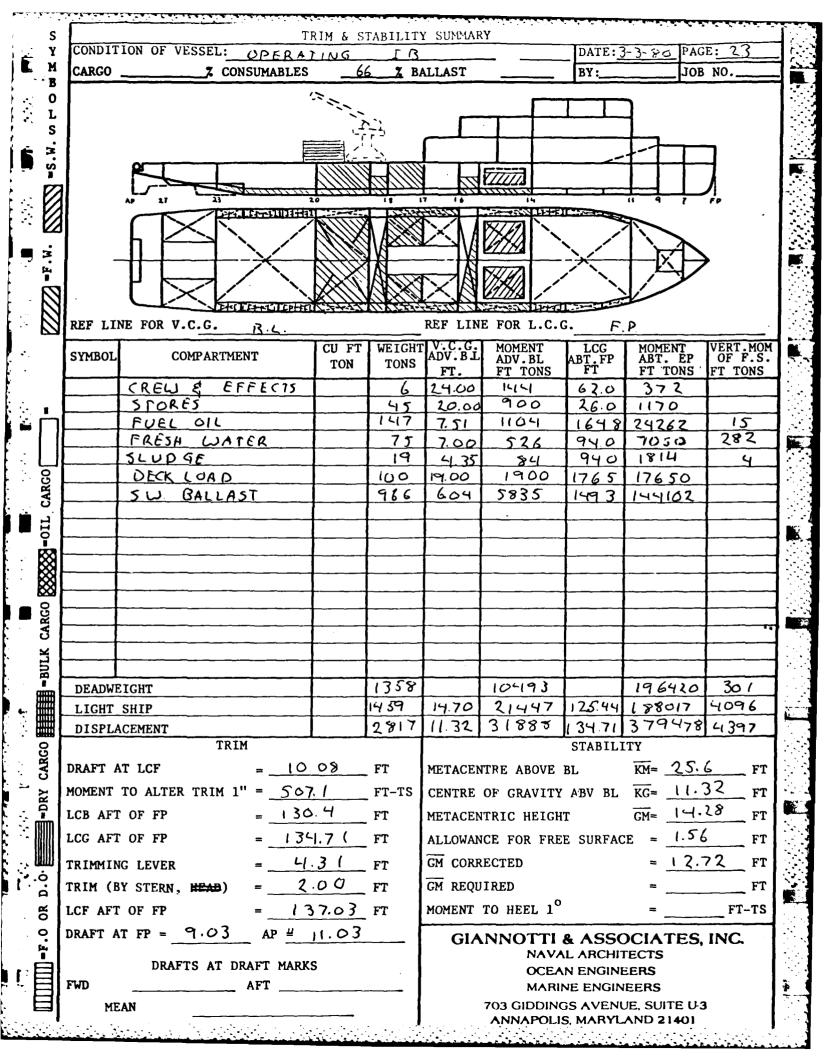




CYCERATING COND. IA, IIA J. J. HENRY CO. INC. COMPARTMENT CAPACITIES DATE 4-2-75 PAGE 7 1 MIO JO3 HO. 1/16 REF. LINE FOR L.C.G. REF. LINE FOR Y.C.O. V. C.Q. HOLLENT L.C.G. HOMEHL VERT. MOM. WEIGHT CAP. OF F.S. F7. TOX3 ADT. F.P. COMPARTMENT FR. ADV. DL ACV. DL. ADT. F.P. CU FT. TONS FT. TO::S FT. TOMS FT. FT. (43%) FUEL OIL 1860 3906 **\***/3 21.0 7.64 160 **(3)** WING TK 20-21 12.8 80 188.6 2414 6.28 ×14 (P) 1 7.60 160 202.0 0202 2 21.0 (5) 21-22 ¥15 ŧ (P) **216** 14.7 7.64 112 216.0 3175 22-23 \*17 (2) (P) ٧ 7/8 7.45 zol.l 21154 105.2 784 SUB TOTAL FRESH WATER TK (66%) 94.0 263 3525 141 37.5 7.00 15 F. W. TK (2) (P) ¥ 526 7050 75 94.0 282 7.00 SUB TOTAL 19.3 84 1814 SLUDGE TK (50%) 12-15% 4.35 94.0 4 S.W. RALLAST TK. 136.6 1.50 205 103,4 14-17 14/24 DB \*1 21392 156.6 17-20 ŧ 99.4 2,51 250 201.4 20019 45 20-23 94.0 કેલ્ટર્ક 38.6 7.80 301 WIIIS TK 14-15% (5) 130.0 6253 315 16-18 49.1 × 3 (P) # 9 (5) (105 166.0 ·:: '-:20 38.6 (P) 301 210 ŧ 211 (5) 50631 2967 166.0 HO!D TK 329.1 9.00 (¢) 15:20 ×6 833 232.1 19334 23-27 833 1000 (P) (3) 1 1080.3 164.57 177784 643 6941 SUR TOTAL

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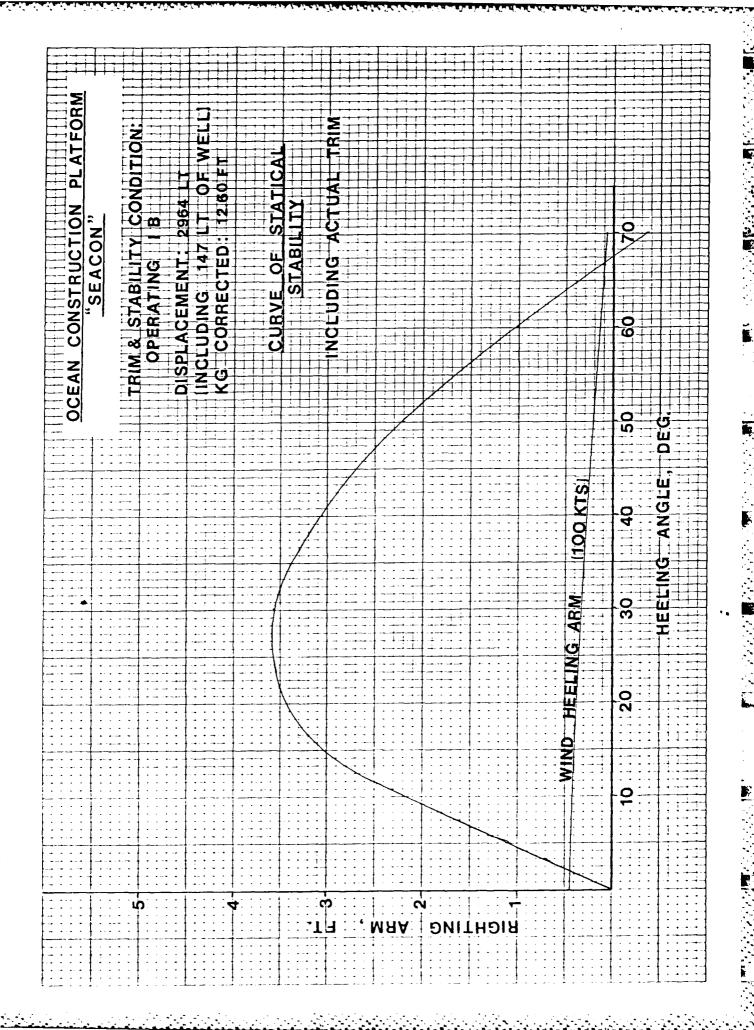


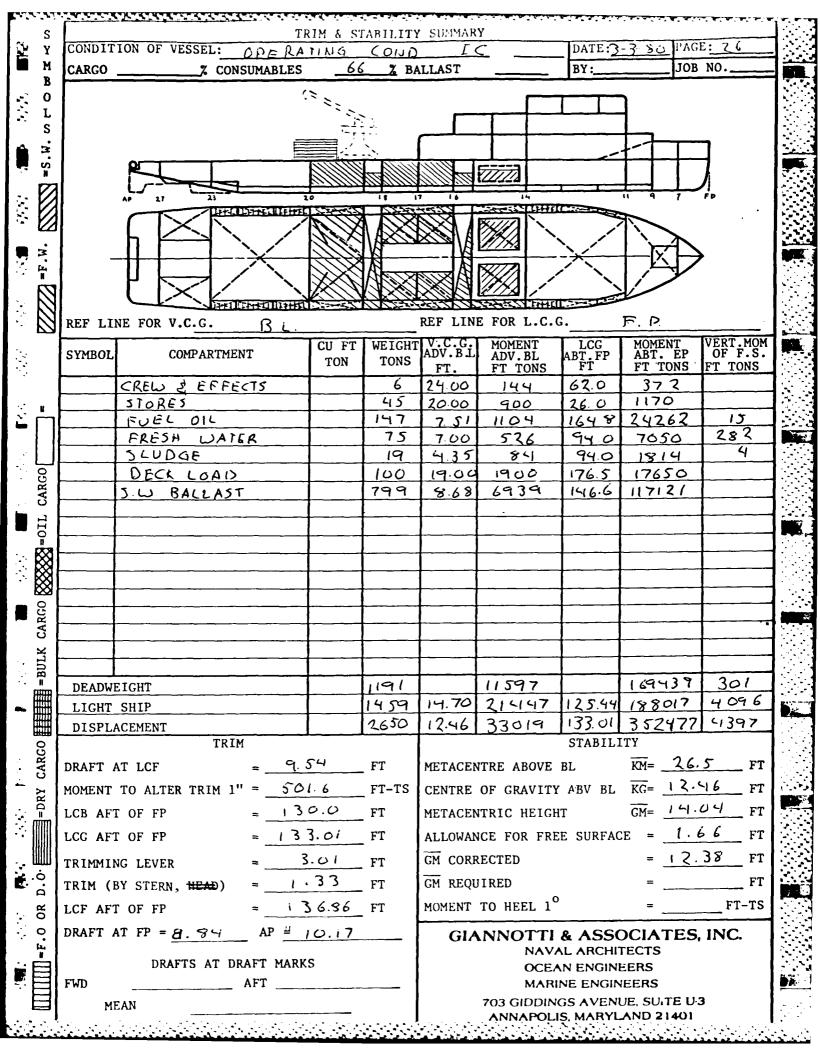
## COMPARTMENT CAPACITIES

IB J. J. HENRY co. IIIC.

DATE 4-7-75 PAGE 24

REF. LINE FOR V.C.O. BL.		REF. LINI	E FOR L.C.	6. <u>F</u>	P	E_ YO	<u> </u>	NO 1765
COUPARTHENT	FR.	CAP. CU.FT.	TEIGHT TOUS	V. C.G. ABV. BL. FT.	HOMENT ABV. DL. FT. TOHS	L.C.G. ABT. F.P. FT.	ADT. F.P.	VERT. MOM. OF F.S.
FUEL OIL (65%)								
#5 WING TK (S)	13-14		21,0	7.64	160	74.0		2
<sup>™</sup> 6 (P)	13-14		21.0	7.64	160	74.0	1554	2
<sup>1</sup> 13 (5)	20.21		21.0	7.64	160	186.0		2
14 (P)	20-21		17.8	6.28	80	123.6	2414	1 -7.
<sup>n</sup> 15 (5)	21-22		21.0	7.60	160	202.0	· · · · · · · · · · · · · · · · · · ·	3.
	21-22		0.15	7.60	160	202.0	<del></del>	2
£ 17 (S)	22-23		14.7	7.64	112	216.0		2
(4) (6)	22-23		14.7	7.64	112	216.0	3175	2
SUB TOTAL			147.2	7.51	1104	164.8	24262	15
								<b>1</b>
7 ( - 8)			<b></b>	ļ			ļ —————	
FRESH WATER (65%)	<del>                                     </del>		37.5	7.00	263	94.0	3525	141
F.W. TK (P)	15	,	37.5	7.00	763	94.0	3825	141
	13		31.5	1,,00		17.0	70.5	
SUS TOTAL		·	75.0	7.00	526	940	7050	782
5		<u></u>	10 2	4.35	0.4	94.0	1016	4
SLUDGE TK (50% YP)	14-15/2	 - <del></del>	19.3	4.55	84-	14.0	1314	4
1								
S.W. BALLAST								
73 D. B. TK.	14-17		186.6	1.50	205	103.4	14124	
1 4.	17-20		136,6	1.50		156.6	21392	
*5	20.23		02.4	2.51	250	201.4	20019	
#7 WING TK. (S)	1-154		33.6	7.80	301	.04.0	3628	
	16-18		48.1	7.30		130.0	6253	
$1^{2} \circ \qquad \qquad (S)$	16-18			7.30		130.0	6253	
	11-18		64.5			138.0	9901	<b></b>
· · · · · · · · · · · · · · · · · · ·	17-18		64.5			133.0	89.01	
(生)	13/1:-20		329.1	C0, P	2962	166.0	54631	Pris.
SUE TOTAL			965.5	6.04	5835	149.75	144102	
				0.0		<u> </u>		
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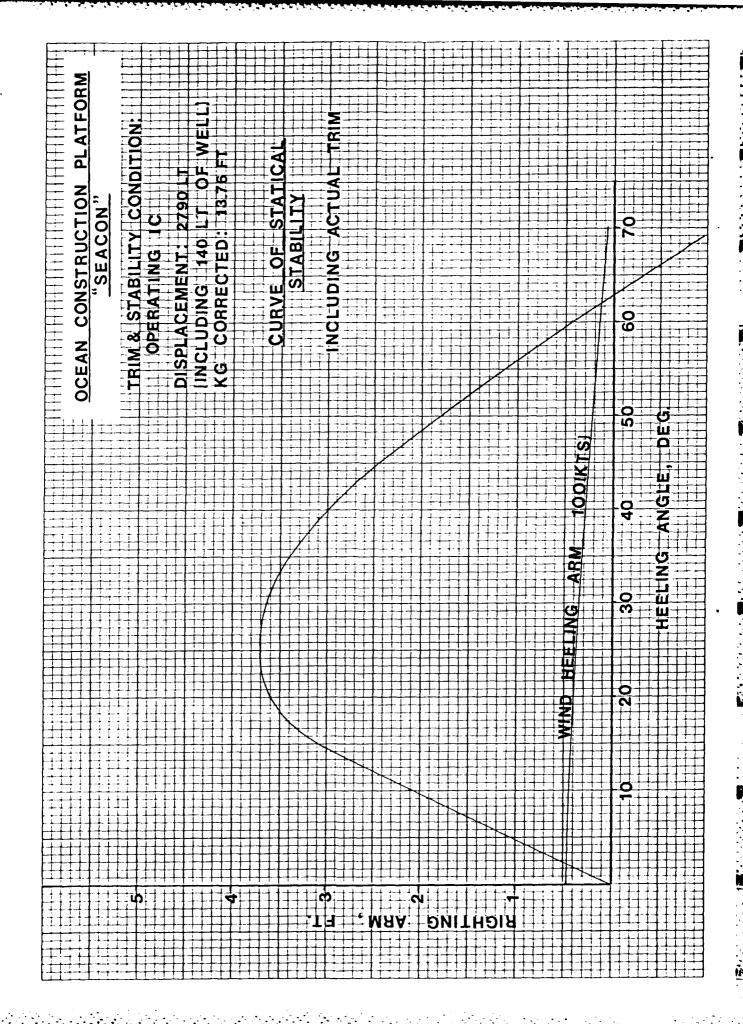


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COMPARTMENT CAPACITIES

J. J. HENRY co. mc. DATE 4-2-75 PAGE 27

REF. LINE FOR V.C.	a B.L.		REF. LIN	E FOR L.C.	6. <u>F.</u>	R	DY V	15 10:	10. 17 20 T
COMPARTE		FR.	CAP.	WEIGHT TOHS	V. C.G. ADV. DL. FT.	HOLEHT	L.C.G. ABT. F.P. FT.	FT, TONS	VERT. HOM. OF F.S. FT. TOWN
FUEL OIL	(65%)							'.	, i
5 WING	rK (5)	13-14		21.0	7.64	160	74.0	1554	2
*6 I	(P)	13-14		21.0	7.64			1554	2
313	(5)	20-21	<u> </u>	21.0	7.64	160	186.0	3906	2 🔆
114	(P)	20-21	<u> </u>	12.8	6.28	80	133.6	2414	1
<sup>2</sup> 15	(5)	21-22	<u> </u>	21.0	7.60	160	202.0	4242	2
2.10	(P)	21-22		21.0	7.60	160	202.0	4242	7
1417	(5)	22-23		14.7	7.64	112	216.0	3175	2
418	(P)	22.23		14.7	7.64	112	216.0	3175	2
SUB TOTA	<u> </u>		<u> </u>	147.2	7.51	1104	164.8	24262	15
									- Di
FRESH WAT									
F.W. TK	(P)	15			7.00	263	94.0	3525	141
11 11	(5)	15		37.5	7.00	263	94.0	3525	141
SUB TOTA	41			75.0	7.00	526	94.0	7050	282
SLUDGE T	K 50% (?)	14-15/2		19.3	4.35	84	94.0	1314	4
S.W.BALL							075	3650	·
77 WING -		14-151/2		33.6	7.50	301	94.0	3628	<u>-</u> ::
-8		13-13		43.1	7.50	375		6253	
*9		16-13		48.1	7.30	375		6253	
*10		184-20		38.6	<u></u>	301		64-08	
£11 \$		3/2-20		<u> </u>	·		106.0	6403	
= 1 HOLD T		16-17			0.05		122.0	7869	
# 2		16-17		(60.5			155.0	7859 2004	
± 3		17-18			9.00		138.0	1	
t <u> </u>		17-18		320,1	0,00		138.0		P
r 5 +		13%-20							
SUB TOTA	<b>L</b>			799,1	3.68	6939	146.57	117121	
									<b>P</b> F
									<b>D</b>
				1	, ,		1	I .	!





SHPA OCEAN RERING PLATFORN SERIAL NUMBER 0 DAIE 629-75    INIACI CUPPLES OF SIAIICAL SIABILITY   1400 6435 12.092	A. OCEAN.							
MITACT CURVES OF SIAIICAL SIABILLITY   MACE   DRAFT   TRIM		PLATFO	RM	ERIAL	A H	٩	q	
Court   Cour	$\Pi$	- 1	OF SIAL	CAL SIABIL	177			
Second	DISPL	HEEL		U	VCB		<b>—</b>	
5.000 1.97 1.409 6.435 12.039 1.89 1.89 1.89 1.89 1.89 1.89 1.89 1.8	36398	00	s o	00	37	2.04	787	
19,000   19,7   3,947   6,124   12,512   3,23   1,000   1,00	4777	00	2	40	43	2.03	0.1	
20,000** 1971 3,947 6,944 13,191 4,65  50,000** 2014 50,000 1403 6,201 8,401 13,191 4,65  50,000 1403 6,201 8,401 20,134 21,13  50,000 1403 6,201 8,401 20,134 21,13  50,000 2,100 4,127 8,657 10,64  50,000 3,40 10,60	2000	90	78.1	34	ν. υ.	2.15	23.7	
10   10   10   10   10   10   10   10		00.0	-67	3.94	36	3.18	65	
\$\begin{array}{c c c c c c c c c c c c c c c c c c c	- 1.6	000	770.7	* * * * * * * * * * * * * * * * * * *	* O	5.06	7.31	
\$\begin{array}{c c c c c c c c c c c c c c c c c c c		00.0	103	.0.	40	0.13	3.76	
\$\text{27} \tag{5.000} 5.			165	44	7 6	4 8 4	7044	
\$\begin{array}{c c c c c c c c c c c c c c c c c c c	2542.0		0.0	000	S S S S	8.40	0.19	
10   10   10   10   10   10   10   10		5.00	1.150	9	67	69	59	
12,000   2,100   5,000   5,000   5,000   6,0	FULL LOAD	0000	2.273	80	8	67	49	
30.000 4.274 9.492 6.740 8.820 1.25 50.000 3.49 10.451 7.401 8.805 3.25 50.0009 11.413 8.501 8.069 12.75 70.000 0.00	K6 = 14.27	v 0	25.7	000	<i>w w</i>	62	527	
10.451   7.401   8.805   3.25     2.18		0000	4.274	40	77	82	25	
\$50,000  \( \text{Correction} \)  \( Cor		00.0	و بر م	445	40	80	.25	
70.000			7.218	* <b>-</b>	* C	* (	****	
33       15,000       2,214       4,175       7,768       2,95         5,000       1,28       2,214       4,271       7,768       2,95         3,3       15,000       3.80       6,665       5,057       7,766       2,87         3,0000       3.80       6,665       5,057       7,709       2,76         40,000       3.8       11,388       7,1443       3,86         40,000       3.6       11,388       7,1443       3,86         50,000       3.6       11,388       7,1443       3,86         70,000       3.6       12,347       8,251       4,659       6,08         70,000       1.74       12,552       8,692       17,43       3,137         70,000       1.74       12,552       8,692       17,43       3,137         70,000       1.10       1,726       5,416       9,791       5,21         5,000       1.10       3,454       5,643       9,791       5,94         50,000       2.86       4,922       13,744       23,52         50,000       3.02       8,149       7,476       15,275       16,292         50,000       3.02       8,149		00.0	- 1.19	60	000	5.4	3.98	
\$\frac{5}{2}\$\frac{1}{2}\$\frac	~	00.	9 6	00	7	79	2.96	
\$3 20,000 4.77 8,565 5,057 7,709 2,75   20,000 4.77 8,565 5,651 7,625 2,85   30,000 3,68 11,388 7,140 6,999 6,08   50,000 3,68 11,388 7,140 6,999 6,08   50,000 -1.343 12,552 8,692 1,645 31,37   70,000 -1.343 12,552 8,692 1,645 31,37   70,000 -1.343 12,552 8,692 1,645 31,37   70,000 -1.343 12,552 8,692 1,645 31,37   70,000 -1.343 1,726 5,416 9,788 5,23   7,21 3,454 5,643 9,786 5,23   7,21 3,454 5,643 9,786 5,32   7,21 3,414 5,643 9,786 5,32   7,21 3,414	AI SUIPSEISO		2.565	44.		78	92	
20,000     477     8,565     5,651     7,625     2,82       30,000     4,744     10,485     6,519     7,443     3,86       40,000     3,68     11,388     7,140     6,999     6,08       50,000     3,56     12,347     8,251     4,6343     8,81       70,000     13,43     12,347     8,251     4,659     17,43       70,000     1,10     1,02,347     8,8251     4,659     17,43       70,000     1,10     1,02,347     8,8251     4,659     17,43       70,000     1,10     1,02,347     8,810     9,791     5,23       70,000     1,10     1,02     1,03     1,045     1,045       70,000     2,86     4,922     5,643     9,791     5,94       70,000     3,481     7,0351     6,925     11,185     10,525       50,000     3,048     7,047     10,225     6,999       50,000     3,048     7,047     13,744     23,652       50,000     3,048     8,940     10,225     10,525       50,000     3,048     4,922     5,946     10,225     6,999       50,000     3,048     7,047     10,225     3,991       50,000	]	5.00	3.80	99•	0	70	76	
\$68       \$18.388       \$7.140       \$6.999       \$6.08         \$50.000**       \$7.20************************       \$6.343       \$8.81         \$50.000**       \$3.56       \$12.347       \$8.251       \$4.559       \$6.08         \$0.000       \$3.56       \$12.347       \$8.81       \$17.443       \$12.552       \$8.692       \$17.443       \$17.444	K6 - 14.83	000	ביר. בירים בירים	56.	40 n	295	92	
50.000**       2.201       ****************       6.343       8.81         50.000**       3.56       12.347       8.251       4.559       17.43         70.000       -1.343       12.552       8.692       1.645       31.37         0.000       -1.343       12.552       8.692       1.645       31.37         0.000       -1.343       12.552       8.692       17.43       31.37         1.0			87 %	 	76.	0 t	0 0 0 C	
50.000       .356       12.347       8.251       4.589       17.43         70.000       -1.343       12.552       8.692       1.645       31.37         0.000       0.000       5.340       9.791       5.23         5.000       1.0       1.726       5.416       9.783       5.23         15.000       2.86       4.922       5.965       9.786       5.94         33       20.000       3.419       5.974       6.294       10.225       6.99         30.000       3.48       7.351       6.925       11.185       10.52       6.99         40.000       3.02       8.149       7.476       12.275       16.22       50.50         50.000**       7.068       ************************************		0000	2.201	***	**	34		
70,000 - 1,545 12,552 8,692 1,645 31,37 0,000 0.0 0,000 5,340 9,791 5,21 5,000 1, 10 1,726 5,416 9,783 5,23 15,000 2,86 4,922 5,945 9,786 5,32 30,000 3,419 5,974 6,294 10,225 6,99 40,000 3,42 5,945 10,225 6,99 40,000 3,48 7,88,88,88,88 13,744 23,52 50,000 8, 2,48,88,88,88,88,88 13,744 23,52 2,068 8,962 8,407 15,292 39,14		0.00	356	34	22	5.5	7.43	
I. (a)       1,726       5,416       9,783       5,23         I. (a)       1,000       2,86       4,922       5,643       9,786       5,32         33       20,000       3,419       5,974       6,294       10,225       6,99         30,000       3,481       7,351       6,925       11,185       10,52         40,000       3,02       8,149       7,476       12,275       16,22         50,000       3,02       8,149       7,476       12,275       16,22         50,000       3,02       8,149       7,476       12,275       16,22         50,000       3,02       8,962       8,962       13,744       23,52         40,000       3,02       8,962       8,407       15,292       39,14			0.0		969	• 64 10	1.37	
1.0     1.2     3     454     5     643     9     786     5     3       3     20     3     419     4     922     5     965     9     9     9     10     5     9       3     20     3     419     5     9     7     9     90     10     2     9     9     10     10     2     9     9     10     10     2     10     10     5     10     5     10     5     10     5     10     5     10     5     10     5     2     10     5     2     10     5     2     10     5     2			0 - 1	.72	41	7.8	23	
5.000 2.86 4.922 5.965 9.901 5.94 0.000 3.49 5.974 6.294 10.225 6.99 0.000 3.48 7.351 6.925 11.185 10.52 0.000 3.48 8.44.44.44.44 13.275 16.22 0.000** 2.068 *********** 13.744 23.52 0.000 3.48 8.440 7.647 15.292 39.14	OPERATING ILA	00°0	17.7	45	49	78	32	
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0.000 3.02 8.149 7.476 12.275 16.22 0.000** 2.068 *********** 13.744 23.52 0.000. 3.68 8.962 8.407 15.292 39.14			7 78	35	26	1.18	0 0 0 0	
0.000** 4.068 *********** 13.744 23.52 0.000. 16 8.962 8.407 15.292 39.14		00.0	3.62	8.14	647	2.27	6.22	
41946 2636T JOHNO 20610		0000	76.7	* * * * * * * * * * * * * * * * * * *	* (	3.74	3,52	
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NIMACT CURVES OF STATICAL STABILITY   1	•							
HEEL   RA   TCB   VCB   DRAFT   LO	IN	LTACT_CURVES	- 1	إر	117			
TED 10.000 2.05 0.00 5.818 10.358 10.358 15.000 2.06 1.714 2.972 6.068 10.463 1	DISPL	HEEL	RA	U.	VCB	RA	TRIM	
TA 10.000 1.714 2.972 6.068 10.358 10.463 10	3145.5	0	9.0	0	9	0.35	14	
2.50 2.000 2.11 4.063 6.555 11.249 1	を担めいませるもの	500	.87	ທິວ	88	0.35	8.238	
2.26		00.0	7.27	70	000	0.0	0.21	
20.000 2.038 5.929 7.050 12.598 11 50.000 1.506 6.601 7.514 14.242 2 50.000 1.547 7.462 8.647 25.012 9 70.000 1.00 1.716 5.378 19.953 7.60 20.000 3.02 5.007 5.948 10.001 7.60 20.000 3.02 5.007 5.948 10.001 7.60 20.000 3.02 5.007 5.948 10.001 7.60 20.000 3.03 5.03 8.544 14.955 2 70.000 1.039 8.544 14.955 2 70.000 1.039 8.548 12.160 11 7.00 1.039 8.390 6.880 10.208 7.00 1.039 8.390 6.880 10.208 7.00 1.039 8.390 6.880 10.208 7.00 1.039 8.390 6.880 10.208 7.00 1.039 8.390 6.880 10.208 7.00 1.039 8.390 6.880 10.208 7.00 1.039 8.390 6.880 10.208 7.00 1.039 8.390 6.880 10.208 7.00 1.039 8.390 6.880 10.208 7.00 1.039 8.390 10.208 7.00 10.000 10.000 10.208 7.00 10.000 10.000 10.208 7.00 10.000 10.000 10.208 7.00 10.000 10.000 10.208 7.00 10.000 10.000 10.208 7.00 10.000 10.000 10.208 7.00 10.000 10.000 10.208 7.00 10.000 10.000 10.208 7.00 10.000 10.208 7.00 10.000 10.208 7.00 10.000 10.208 7.00 10.000 10.208 7.00 10.000 10.208 7.00 10.000 10.208 7.00 10.208 10.208 7.00 10.208 10.208 7.00 10.208 10.208 7.00 10.208 10.208 7.00 10.208 10.208 7.00 10.208 10.208 7.00 10.208 10.208 7.00 10.208 10.208 7.00 10.208 10.208 7.00 10.208 10.208 7.00 10.208 10.208 7.00 10.208 10.208 7.00 10.208 10.208 7.00 10	8711	00.0	2.266	Φ.	55	1.24	1.93	
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7.60		00.0	1. 506	<b>√</b> 0 ×	* ~.*	* 5¢	4 • 78	
70,000 -1.547 7,462 8,647 25,019 9  0,000 2.158 3,454 5,607 9,949  2,60 20,000 3,143 8,474 1,182  1,000 3,143 8,477 7,586 12,160 1,182  1,000 3,143 8,477 7,586 12,160 1,182  1,000 3,143 8,477 7,586 12,160 1,182  1,000 1,000 3,148 8,892 1,000  1,000 0,00 0,000 2,124 8,884  1,000 0,00 0,000 2,124 8,884  1,000 0,00 0,000 3,48 8,892 13,602  2,000 0,00 3,48 8,390 6,880 10,208  2,000 0,00 3,48 8,390 6,880 10,208  2,000 0,00 3,48 8,390 6,880 10,208  2,000 0,00 3,48 8,390 6,880 10,208  2,000 0,00 3,48 8,390 6,880 10,208  2,000 0,00 3,48 8,390 1,200  1,000 0,00 0,00 3,48 8,8892 13,602 3			- 395	. ε	: (C)	9.31	4.20	
TE 10,000 0.0 0.000 5,303 9,953 7,600 1.10 1.716 5,378 9,949 7,936		00.0	-1.547	1	99	5.01	2.96	
TES 15,000 1.15 1,716 5,378 9,949  3.60 15,000 3.043 5,102 5,007 10,291  3.60 20,000 3.73 8,477 7,586 12,160 1,029 1,000  3.73 8,477 7,586 12,160 1,029 1,039 1,03	7964.0	00	0.0	Q I	900	95	.53	
7.60 15.000 3.02 5.007 5.948 10.001 3.03 30.000 3.448 6.102 6.521 10.291 10.291 10.291 30.000 3.173 8.477 7.586 12.160 11.82 50.000 2.124 8.888 8.544 14.955 2 10.000 0.0 0.000 3.481 8.892 18.083 4.000 0.0 0.000 3.481 8.892 18.083 4.000 0.0 0.000 3.448 5.724 9.412 5.000 3.643 8.390 6.880 10.208 8.390 6.880 10.208 8.50.000 3.643 8.390 6.880 10.208 8.888 10.154 10.154 10.364 8.892 13.602 3.000 0.	Н	v • 00	2.158	7.	37	46.0	60	
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50,000 2,123 8,477 7,586 12,160 1 50,000 2,123 8,448 8,544 14,955 2 70,000 0.0 0,000 5,007 9,433 4 0,000 1.05 1,821 5,007 9,429 15,000 2,000 3,659 5,329 9,412 20,000 3,598 6,390 6,880 10,208 3,643 8,390 6,880 10,208 3,643 8,390 6,880 10,208 3,643 10,190 8,522 12,130 2 70,000 -1,154 10,364 8,892 13,602 3		0000	3.581	٠.	16.	1.18	18	
5 10 000			2.1.2	J ×	• * U * © *	*** ***	* O	
70,000357 9,481 8,892 12,083 4 0,000 0.0 0,000 5,007 9,433 5,000 1.05 1,821 5,087 9,429 15,000 3.00 3.48 5,724 9,410 20,000 3.643 8,390 6,880 10,208 3.643 8,390 6,880 10,208 50,000 1.792 ***** ***** ***** 50,000 1.792 ***** ***** ***** 10,190 8,522 12,130 2		00.0	1.029	w	40.	4.95	8.21	
5.000 1.65 1.821 5.087 9.423 5.000 2.109 3.659 5.329 9.412 15.000 3.69 5.329 9.412 20.000 3.69 6.746 6.130 9.595 3.0 5.48 5.724 9.410 3.000 3.69 6.880 10.208 50.000 1.99 8.390 6.880 10.208 50.000 1.99 8.390 6.880 10.208 70.000 1.59 10.190 8.522 12.130 2		0000	357	7	689	80.9	8.50	
376 10,000 2.109 3,659 5,329 9,412 20,000 3.643 8,390 6,880 10,208 3.04 8,890 10,208 1,792 4,000 1,792 8,844 8,884 1,54 10,364 8,892 13,602 3.000 1,154 10,364 8,892 13,602 3.000 1,154 10,364 8,892 13,602 3.000 1,154 10,364 8,892 13,602 3.000 1,154 10,364 8,892 13,602 3.000 1,154 10,364 8,892 13,602 3.000 1,154 10,364 8,892 13,602 3.000 1,154 10,364 8,892 13,602 3.000 1,154 10,364 8,892 13,602 3.000 1,154 10,364	0.0865		0.0	O q	0	4 4	2.c	
15.000       3.10       5.448       5.724       9.410         20.000       3.598       6.746       6.130       9.595         30.000       3.643       8.390       6.880       10.208         30.000       3.643       8.390       6.880       10.288         50.000       1.742       *****       *****       *****         60.000       434       10.190       8.522       12.130         70.000       -1.154       10.364       8.892       13.602       3	OPERATING IC		2.109	9	0 C	4 1 2	700	
6 = 1376       3 548       6,130       9,595         6 = 1376       30,000       3 643       8,390       6,880       10,208         50,000       1742       *****       *****       *****         60,000       434       10,190       8,522       12,130       2         70,000       434       10,190       8,892       13,602       3		5.00	3.10	4	72	41	65	
G = 1376       30.000       3.643       8.390       6.880       10.208         50.000       1.742       *****       *****       *****         50.000       1.742       *****       *****       *****         60.000       1.34       10.190       8.522       12.130       2         70.000       1.154       10.364       8.892       13.602       3		0000	3.548	-	£.	9.59	.37	
50.000 1.792	٠	00.0	3.643	<i>C1</i> (	88	0.20	930	
0.000 - 1.154 10.364 8.892 12.130 2 0.000 - 1.154 10.364 8.892 13.602 3				*	* * *	0 * * *		
0.000 -1.154 10.364 8.892 13.602 3		000	~		52	2.13	2.23	
		00.0	6	•	989	3.60	9.02	[
		••					•	
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	•		•					

DISPL	ACEMENT	S AND	CENTERS	CORREC	TED FOR	WELL
	DISPL.	VCG	V. M. T.	L.C. 6	L. M. T	. F. S.
CAPA	CITY CON	<b>D</b> .				
	3461.8	10.57	36588	133.94	483633	4403
WEL	178	6.08	1082	130.00	23140	31 2
	3639.8		37670 4715		486773	4715
		11.64	42385			
FULL	2414 128 2542	12.84 4.39	30996 562 31558	130.00	312830 16640	
·		14.27	36273			ė
OPERA	TING CON	AI O				
	2152.8	13.37	28780	134.77	290106	41096
WELL	116	3.97	460	130.00	12080	312
	2270		29240			4408
		14.83	33648			

3

750 000

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**A**.

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È	- OF	PERATING	ΠA				
253	WELL	2789.8	11.03 4.99	30771 729	141.7		
		2935.8		31500			41705
322			12.33	36205	_		
3	OPE	ERATING	III A				
		2 989.5	11.70	34977	146.09	436736	4393
7	ω <sub>ειι</sub>	156	5.32	830	130.00	20280	312
		3145.5		35807			4703
				4703			
			17.88	40510			
	OPE	RATING	Γß			۵	
		2817	11.32	३।४४४	134.71	379478	4397
	J€(L	147	5.04	741	130.00	19110	312
		2964	•	32629 4709			4709
Š			17.60	37338			
<b>.</b>	OPE	ERATING	ΓC				
		2650	17.46	33019	133.01	352477	4397
		140	4.77	668	130.00	18500	312
X		2790		33687			4709
S.			13.76	38396			

## WIND HEELING ARM

$$HA = \frac{0.004 \text{ V}^2 \text{AL } \text{COS}^2 \theta}{2240 \text{ } \Delta}$$
$$= HA_0 \cos^2 \theta$$

WHERE WIND SPEED IN KTS

PROJECTED SAIL AREA

LEVER ARM FROM HALF DRAFT TO CENTER OF SAIL AREA

HEEL ANGLE θ

HAO HEELING ARM AT OO

HA	·		HEELI	NG ANO	SLES			
COND.	НА。	10°	20°	30°	40°	50°	60°	70°
CAPACITY CONE	0.303	0,294	0.268	0.227	0./78	0,125	0.076	0.035
FULL LOAD	0.519	0.503	0.458	0.389	0,305	0,214	0,130	0,061
IA	0.584	0.566	0,5/6	0,438	0,343	0.241	0,126	0.068
li A	0,431	0,418	0.381	0.323	0,253	0,178	0,108	0.050
IIIA	0.389	0,377	0.343	0,292	0,228	0,161	0.097	0.046
IB	0.425	0.412	0.375	0.319	0.249	0.176	0.106	0.050
1C	0.462	0.448	0.408	0.347	0.27/	0,171	0.116	0.654

BASED ON V=100 KTS

MR 1-20

ESTIMATE OF WEIGHT FOR SHIPS, YORK SKEET

Mark #15 4-1-15 2.5 REFERRED TO 200 416 - 1448 CENTER OF GRAVIT REFERRED TO FRANE NO. 1 SEMENTS 0.5 8 23 1 5 800 coviling parties 5800 67 9670 S LA JOSSE PROMISE 20303 4.08 4.49 4.49 I 5 14.509 - 4410 8899 168 19535 MONENTS. 2:2 14.30 0.0 17.46 26.66 14.49 15:10 14.83 0,29 ABOVE BASE 14.20 1292 128 831-614. WEIGHT (Founds) (Tons) 15 TOTALS, POUNDS TONS ANTI-POLL TANKS EXISTING LIGHTSHIP SUB TOTAL REHOVALS HARGIN WEIGHT MARGIN DESCRIPTION PASSIVE TOIAL TOTAL

ESTIMATE OF WEIGHT FOR SHIFS, WORK SHEET

		•			ŧ						MI 420
			157	() H	4					3 V C	
NO LE RUS DO	WEIGHT					CENTE	CENTER OF GRAVITY				
	1	ABOVE	MOMENTS		REFERRED TO FRAME NO.	FRAME N	0. [7	REFERRED TO	2		
,,,		35		2	MONEY 1	1.57	MONENTS	Post	1 (4)	24.00	MONTH!
NAGE TO ATOM	-										
ALL FULL	428			2	077.55			-			
AFT 2x2	8.77	5.00	4285	1	08000	0 0 1	05250	-		T	
o	7834	1		,				1			
N STA	4162	2.00	8323			12.0	406 144	1		T	
1 2017. 20'x 2 1', 2 x 11.3"	1530	-				112.0	L				
	14811	0.85	12608			47.13	9				
	% ५०	s.	8/8	1		-					
l	72/	5.0	640	_		110.0	14050				
CVE (0.3°, (6.3°	479	1.5	639	110.0	50490	-		_			
	1469	7:	5500	1		1		-			
17 16,3	734	17:	1/0//	•		,		-			
ECONE SEEK 442.1 1. 3.12 411.37	918	2.0	1836	1		10.0	100980				
1	23:52	1.38	7388			12,08	64570				,
201 300										T	
32.715	6120	3.0	18360	1		1		-		T	
	1428	2.75	3872			ı		-			
1.8. K 2 - 21 - 12.71	714	5,00	3570	•		110.0	7.8540	-			
- 1	8242	3.73	25082			9.53	18650				
9						1	***************************************				
32.16.	6528	15.0	02616	=		1		-			
STIFFES 32 x7 x 25 A	5600	14.7.		1		•		-		T	
- [	1212.8	(4.88	180520			1	***************************************				
GROUP 111											
1500H 15										T	
7	3476	33.0		86.0				-			
0 ×8× 10	640	32,0						-		T	
8 - 8 - 1	640	33.0									
HOLVE TOP 21 x 9 2113	18+8	37.0									
MISC.	4:6	34.12						-		T	9
	1000	34.12	538245	86.0	6,02000			-		T	
										T	-
TOTALS, POUNDS	.									Ī	
70x3		1								T	
C		•							1		72

PARE 3-20

ESTIMATE OF WEIGHT FOR SHIPS, WORK SHEET

11 THE CLASS OF THE COLUMN TO			955 P	PROHISE	156					DA16	
						CENTER	OF GRAVITY				
20 10 10	(POUNDS)	37,68			REFERED TO	-	-1	313K	REFERRED TO		
STANCHIC	(Tons)	BASE	MOMENTS.	7.80	WOLE 475	47.1	MONERS S	1904	\$ 15,3707	31.25	eoe'e's
SPOUP 114											
						1					
12, C + STIFF, N. 16 , 20%.	4800	7.7		/		,					
12,618 8,9,21	3672	٦.٢		)		1					
P. 2 . 2 . 4 . 1.	15,76	٦,٢		)		1					
10 10	8640	0,6	77760	36.0	311040	1					
7	18168	321	149220	17.12	311040					1	
GROUP 115											
ļ											
Cove R	5720	41.4		.1		32,0				1	
	144,000	71.4									
17 +571 FF )	56.080	20.77									
S	18000	20,12									
VIALICINA 4 PAILS	001°3	27.50									
	८००४	2.1,00								T +	
	2005	26,65	- 1								
	C 8 P 8 12		821886158				1801360				
								1			
SUMMARY OF REMOVALS								1			
	1.07	1000	00771	_	1		711863				
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TOTALS, POURDS								-		1	
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ESTIMATE OF WEIGHT FOR SMIPS, WORK SHEET Havships weigh-2 (11-57)

PROUNG

BUDGET BUREAU NO. 45-8281 REPORT-BUSHIPS-\$281-4

84. 84. REFERRED TO F04 CENTER OF GRAVIT 95.0 95000 REFERRED TO FRAME NO. 17 M 0000p2 80000 30000 SANDMON 120000 80.0 50.0 8,0.0 80.03 2 39000 15000 18000 4200 MOMENTS 9000 V.S.S. -26.0 0.7 15.0 ACOVE BASE 0,6 0.9 3000 1000 WEIGHT (Pounds) (Tons) 1500 0000 0001 40. GENERATORS 60 KW DC GENERATOR Power Distrib, (CABLE) Sr17. SWITCH BOARD DESCRIPTION 300 REMOVALS 210H7H21 2-60 KW Sw08 301 305

6

52.82 28.00-

12,00

3.17

TOTALS, POUNDS TONS

375000 167.41

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DAR 5-20

ESTIMATE OF VEIGHT FOR SHIPS, WORK SHEET ALVENIPS 48164-2 (11-57)

BUDGET BUREAU NO. 45-R28!

		U.S.\$	PROMISE	153			REPORT-BU	BUDGET BUREAU NO. 45-KZBI REPORT-BUSHIPS-9291-4	-K26:	DATE	
	WE I GHT					CENTER OF	OF GRAVITY				
DESCRIPTION	(Pounds)	ABOVE	SINING		REFERRED TO FRAME NO. 17	FRAME NO.	17	REF	REFERRED TO		
んじんのひょしら	(1011)	BASE	mancul s	ğ	MOMENTS	1.67	STATION	PORT	MONEYTS	84.90	NOMENTS.
91100 1111 000 01100											
. R.	300	20.00		2000							
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\$200 - 100 -		0 8	1	2 2	15000						
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02-5 m 81.69 PATE REFERRED TO BUDGET BUREAU NO. 45-RZ81 REPORT-BUSHIP3-9291-4 PORT CENTER OF GRAVITY 56.0 125 440 MOMENTS REFERRED TO FRAME NO. Ş 1 1245,760 156.14. 54.0 640000 120.0 420 000 132,000 80.019200 MONE NT 8 63.91 38.0 PROMISA 8 564160 13.56 117.93 49000 MOMENTS 17.0 38080 13.0 130000 17.0 38080 6.0 9000 U.S.S. 0.4 ABOVE BASE 8.70 WEIGHT (Founds) 3500 10000 0722 0772 1500 TOTALS, POUNDS ESTIMATE OF WEIGHT FOR SHIPS, WORK SKEET AAVSHIPS 4616A-2 (11-57) HOOKING TOWING ANCHORS 418 COUDITION 1105 FREATING DENUMICHING HACHY (2) HISC FIPING SYST. צסצ אנטאפוטג ואנזפע. DESCRIPTION REMOUSE Group

PAR 7-20

ESTINATE OF MEIGHT FOR SHIPS, VORK SHEET HAVSHIPS 46164-2 (11-57)

ST NOTE OF 91,80 MOMENTS REFERRED TO PORT CENTER OF GRAVITY 7.7-800 MONENTS REFERRED TO FRAME NO. 17 93.0 Ş 1 2799203 1249.64 2855000 STHOM 12.0 640 18.0 52.0 22.0 30.0 86.0 ŝ PROHISE 353.53 MOMENTS U.S.S. -24.0 0,82 18.0 ABOVE ë 9,0 0.11 27.0 کر ه 38500 WEIGHT (Founds) (Tons) 2500 200 17.19 6000 90002 100,0 1000 000 2000 3000 70KS TOTALS, POUNDS JON STRIDGEORDE ENDS & JODGS בטאיטושוויטל ההת בימישל בחוכשל (11 HGN 000 DECK COVERING DESCRIPTION Scener, WR & MESS REMOVALS WCL. 6420031C IFE RAFT らしつり 250ca 710rJ

nne 8-20

ESTIMATE OF WEIGHT FOR SHIPS, WORK SHEET

9.5 SANTHON REFERRED TO P0.87 345337 CENTER OF GRAVIT S La Jron REFERRED TO FRAME NO. 864 556.14 32,32 1249.64 16741 PROMISE ŝ 550 16767 1666 117008 3969.87 38.04 333.53 117.93 10.7/ MOMENTS. ABOVE BASE 8.20 138.25 WEIGHT (Founds) (Tons) 0.36 3.17 17.19 TOTALS, POUNDS TONS SUMMARY OF REMOVALS 200 200 001 300 600 400 DE SCRIPTION 90000

02-6 mu

ESTIMATE OF MEIGHT FOR SMIPS, WORK SHEET

31.88 Į STATEMENT S REFERRED TO 1404 317236 84030 119952 86532 1388493 CENTER OF GRAVITY 619.86 S LW JACK REFERRED TO FRAME NO. 17 0.211 17.73 0.21 20,1 7 Ë 162.92 364948 PROHISE BUNCATE 10.0 109.33 110.0 104.0 110.0 ١ 8 405611 52,46 11503 4500 725699 5584 2677 707018 323.97 ひつい MOMENTS 0,7 9.27 4,00 5,00 2.50 رزهه 4.00 4,00 1 6 16.75 ABOVE BASE 29276 7834 199 de 19 3.50 3338 42210 WEIGHT (Pounds) (Tons) 2876 750 18323 34.97 101 1.4.9 Spe RIPS FE 7-9 10412 441.3

LUJGR BOTT FR 7-9 1042 41.3

Spe RIPS FE 7.9 2 12,22 41.3

LOUG'L BOTT STIFF, 3 12 11 17 6473:2,20,4E TOKS TOTALS, POUNDS (12 Jest 1- 2,56 (F), L. 3# DOUGLE ATEOTT. 128,45,22 ,245 16.22.2.2.2.91 2427,7201,30 0.10 3 14 y2 C 2 15,3# こっこ 7.05 x7 x 14.3E AT HJ.DK ADDITIONS DESCRIPTION 000 EULWARKS BY 0 POTT PLG DOULLES SROUP SROUP FLOARS

משחנואו כאומנו

"PROMISE"

ESTIMATE OF VEIGHT FOR SHIPS, WORK SHEET

07-01 38%

2-24-75 69021 8.0.0 11) 4.25 d 3.25 7.4 <u>ء</u> REFERRED TO 200 3.50 1 1 1 ļ ١ I 1 1 ě E S 1 IN SPECIAL S CENTER OF GRAVI REFERED TO FRAME NO. 1 7 5 7271744 50,62 32.4.6 cutato MONE 47 S 10 00 Stage 64.00 92.00 13.43 24 60 49.00 27.80 70.00 32.02 S.c.c. 00.8 16.00 32.00 24.60 92.00 Sec. es 80.03 64.00 66.00 32.00 φ, 8 ŝ 202 450000 MONEN TS 400 90,0 24.0 64.13 | 31.61 40.0 40.1 27.00 27.60 20.00 21.00 36. 3 3/2.0 31.5 2).00 24.00 4.83 が、よ ABOVE BASE ر . ج 3 143652 1 1011. 3456 3456 189.58 230 5360 15552 3014 13820 32.64 4320 19008 19 44 5760 7394 1944 20.00 WEIGHT (Founds) 1220. 57: 12 1-15 4 Top 12 50 17.51 x 12.4 22 SIDE PLTING: 1/1) ZXZZXXXIZIT PAGE 107A13, POUNDS 22 X49 X 1354 LEVEL 34,49,412 TRANS PHO FR. 12, 20' 18' XIZ" 22.4.1.4.2% 13.5'412' × 12" 8.5'×12' × 12" 40' X 12' X 12' おいしゃしょうじ 12, 75, 12" 24/2/217 (1/3) 3) ~ 11 72 XZ FE.12 25'X9'X 12" (3.5'XIL X 12" 2x48'x12'x 13.5 \* 3.5'X16' × 13.5" SIDE PLT'NG FC 11-17 (1/2) 4 02 Lriet 1349'x 17# ארואפאים פוום עיוז אלא 40'x32'x 12# 0 ADDITIONS DESCRIPTION CP 13 Z Z Bernesal Muldk de FR. 12 TRANS BHD FR. 12 FR 15 לצו בישם נייני ביים ביים כוזם 15 J 3037 10 00 FR. 11 ~ 14 Fra City RHD LEVEL TOK TRAIL BHD Tep OF 145 0 SIDE PUTIC Fe. 10~16 Fe. 16~17 PETCHESH. BETATER GROUP

PRO NISE

ESTIMATE OF WEIGHT FOR SHIPS, WORK SHEET

MR 11-20

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	WE I GHT					CENTER OF	OF GRAVITY				
DESCRIPTION	(Ponude)	ABOVE	200000		REFERRED TO	FRAME NO.	(%) [1.	REFE	REFERRED TO		
ADDITIONS	trous)	BASE	MCMEN 13	7.80	MONE UT S	117	LEGAL NYS.	PORT	MACHIE	9.11	STATE OF THE PERSON OF THE PER
Greve 114											
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PHD LENG'E STIFF, SX32'X !! (P)	1760	7.50		١		J		7.50			
۱.	7344	7.70		١		1				2.50	
PUD LING! SATE SX314 11" (S)	1760	7.50		1		i				7.50	
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٦	74.88	00.0	67392			Ì		-		1	
TOOPE PIND FR. 16 40'VIE'VIET	9182	5.5		16.00				-			
האס עריך לידר בארכ'אוו"	1 <b>9</b> 80	7.50		1600				~~		1	
TIANS AT GUDS LEW Z, SXISKIS,	2295	750		1		1		1		1	
7	4306	9,00		-		16.0		1		1	
5 (1 FF. 8x12' x 119	1056	000		1		16.0		1		1	
TANK TEAMS, PHOS. CLXIS47.5	19 57 (.0.	8.30		36.00				-		1	
Con G'E 1349C. 4x18'47.55	7 6912	8.2.0		36 00						١	
2 4 17 415	6312	12.00		36 00				1		٢	
F. W. TALK BATE 18 2015 15 15	2169 1	4.50		360.1				1		-	
TRANS BELDS VET STEELD XSXT.S' 11"	1650	8.30		36 00				)		-	
10115 : RHD' 1 (146×7 : 11)	195.	8.30		3600				1		-	
Tour Tep 1-1101 (177) 245 419'41"	200 6	12.00		36.00				-			
TANK B. IT LOUGH STEE 24" 115 SITE	1980	4.00		36.00						-	
	7.1										
										[	
- (		f									
PACE TOTALS, POUNDS	93894	9.00	674522	14.74	1.35.661						
1083	51.43		301.13		551.13			-	]	1	1

ESTIMATE OF WEIGHT FOR SHIPS, WORK SHEET

PROHISE.

PAR 12.20

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アレータレーン -0.10 0.4.8 = ] ] 1 Ę 19600 REFERED TO 0.58 4.0 9 ١ 1 PON7 620 METERRED TO FRANC NO. 17 (XX) 17.73 22400 3246 3 0 0 MONE WIS 3251 10.61 109.33 8.0 14.74 0.66 15.23 1,33 Ē 2.889 301380 324 12, 284.5, 43 135 1.202 5 MOMENTS 13.02 221.85 1302 0.12 8.97 8.04 4.67 17,00 S 31.61 9.2.7 4BOVE BASE 14.3 27.0 37.43 34.97 3.50 2.19.50 1.49 33700 15.00 12000 WEIGHT (Pounds) 6800 2800 2-10 C 12,xxx,x 16'4747" 70 KS -TOTALS -- POUNDS 00 150 C ر 0 122 てもアグレー CENTER WELL DE HATCH 521 900JB स्ट्राहरू स्ट्रान WELD (1/2/2.1.5T.) 40017.00A 15 x 32 x 35 DESCRIPTION SROUP -P. 0 UP ROLL-UP DONE POLL UP Dook CENTER WELL SROUP

3401

BARGE "PROMISE

ESTIMATE OF VEIGHT FOR SHIPS, WORK SHEET

nu 13.5

										<b>≯</b>	マード
	WEIGHT					CENTER	ō				
OF SCHIPTION	(Pounds)	ABOVE	SAN SPOR		REFERRED TO	O FRAME NO.	Ø	NE/	REFERRED TO C		
ADDITIONS	(=Tome)	BASC	6 143	710	HOMENTS	100	ACOURT'S	į	440M(419	91.45	EDICATS.
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2-VS VERT AXIS FROD A'HUG'OIA'E,	000001	4				0//					
13 72 et D/A Ch	くいつ	7.		707							
5	\$.00	1		10.7							
	300	1		1001							
2- 51Nº SHAFTS 16:4" DIA (ATT)	1/524	ی				705					
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	400	٤١				50/					
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TOTALS, POUNDS	230824	1	8			39.56	0260516				
1013	103.05	4.6	430.65			39.5E	101630				,
OX TO SECTION	i	,4			STATE STITES						

ESTIMATE OF WEIGHT FOR SHIPS, WORK SHEET

BARGE " PROMISE "

							!			4	50/92
	WE I GHT					CENTER OF GRAVITY	CRAVITY				
OCSCRIPTION	(Founds)	ABOVE	SAN DAY		REFERED TO FRAME NO.		8	/34	REFERENCE TO A		
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11. AIN SWITCH FOARD "5-4"17"	67200	Š	ावशास्त्रहा	22	147840						
wollow Thrustamer	705	7.	410	64	024			//	111/20		
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CHRLE;						+					
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151.65 11.00	360		2700	7	9600			١		1	
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7.26 (66.	260		مالدد		8270			į			
	1277		151178		KRIOH			١			
8	0		96		340						
74/7 350	70		630		2240			Ì		1	
	420		3870		13760			/			
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7:001 40	288	>	2587		mile.						
1,00 90	0)		90	-	320			\			
, U.J.V.	7500	23.5	1,7,150	77	33,000			\		1	
17 07 3 5181	7500	18.5		22	33000			Ì		1	
10001 20001 20101	2000	0	18000	.32	000179			/		/	
		-									
TOTALS. POUNDS	22#or7				11188800				1/2300		
TONS	1000	12.98	1797.70	49.94				2//2	725		
					ı						

ESTIMATE OF WEIGHT FOR SHIPS, WORK SHEET AAVSHIPS GALLS (15-57)

RAVSHIPS 4616A-2 (11-57)				1,01,000			BUDGET BUR	EAU XO. 45	-2281		
		U.S.S.	Ш	ייטע			REPORT-8USHIPS-9291-4	-1626-841H			
	WEIGHT					CENTER	CENTER OF GRAVITY				
DESCRIPTION	(treamete)	ASOVE	KPUFNTA		REFERRED T	REFERRED TO FRAME NO.	1.7	HEF	REFERRED TO		
A00(7:00)	Causi	BASE		2	PONEALS	AVY	MOKENTS	P04	MONEYTS	90,.15	uoid et s
GROUP 400											
WIGGL HOUSE & CHART # KADIO CH	4,0	37.1		86.0							
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TOTALS, POUNDS			Ţ						-		
10%	9.0	33.0.1	297, 170.	51. 32	464.00						
10 011 notes		•		:	COMPUTING CHECALD						

ESTIMATE OF VEIGHT FOR SHIPS, VORK SHEET

BARGE " PROMISE"

nu 16-20

		WEIGHT					CENTER	OF GRAVITY			
Control   Cont	SCRIPTION CONTRACTOR	(Pounds)	ABOVE	PANING!		REFERRED TO		Z	13N	1	
	HODITIONS *	- Course	3576		7.80	MONE UT S	1.1V	E LA JACON	100	<u>L</u>	STATES
Company   Comp											
Notice Pump   Conc   Coup	ŀ										
Note	FIOS	6000	5.0	3000		312000				///	46000
State   Coop   Eurob   Coop		5000		Lowo		Cod-box				_	C40122
Second   S	أة	0001		5000		C2000					00311
Complex		400		2000		0.0502				-	0000
Comparison   Com	ı	3750		18450		19 8000					0.77/6
1000   9   4000   31   3000   34   3000	1	1000	9	0000	56	aktoru				>	2.0.0 //
2	11/07	1000	0	000	22	ع محمد			1	1	
Folic 2 Son Civil (Att)   1200   470   56 400h   50 6000000000000000000000000000000000	3 1918	2000	659	10000	175	10800				/	00022
	FAWS 2500 CTVI	1200	47.0	56400 K	50	00009				1	ŀ
	1 4500 0.01	3000	200	88 500		284000			1	1	
			29.8	23500		7boro			/	١	
10 The Control of the	TRUNKS		22	8800	_	3 gove			/	1	
30 TON A/C 8 DO 34 31300 23 184400 5 TON A/C 8 DO 34 31300 23 184400 3150 UST 3600 4812 9600 NG 3600 1 3600 1 9600 NG 31000 1 3600 1 1500 NG 31000 1 1500 1	WIR TK		7	2 4500		224000			)	*	
5. TOW A/C 340 34 3,120 23 18400 360 45 3600 4 6600 4 6600 4 6600 4 6600 4 6600 4 6600 4 6600 4 6600 4 7600	30 TDN	1600	8/	28800	_	05266					
387 UNT	A/C '	800	36	31200	13	18400			/	/	
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1074.5. POWES 1014.5. POWES 1014.5. POWES 1014.5. POWES 1015. CONTRIBUTE 1015. CONTRIBUTE 1015. CONTRIBUTE 1016. CONTRIBUTE 1017. CONTRIBUTE 1	1	20%	مو	3800	•	9600					
1011. 101101. 101101  1011. 10											
10143, POUNOS  1014 12, 44 16, 47 1086 78984  1015 17 17 17 17 17 17 17 17 17 17 17 17 17											
107A13, POUNDS 107A13, POUNDS 1083 17 16, 47									_		
1071. 10403 17.44 16.47 bo86 78984 17.02											
10113, POUNDS 10-131 10-141 16-41 16											
TOTALS, POUNDS			•								
10713, POUNDS 112, W 16, W 1 6086 78984 16. W 1 16. W									_		
TOTALS, POUNDS											
TOTALS, POUNDS											
TOTALS, POUNDS 12-44 16.41 bo 86 78984					Ţ						
TOTALS, POUNDS 17-17-17 12-44 161-47 BOSB 78984 18984 18104											
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10715, POUNDS 12.44 161.41 hosb 78984 1805 1005		1 1, 1,		0 11:						1.	51416
10.1 12.44 16.41 bo86 78984 19.70 12.44 16.41 bo86 18.61	TOTALS, POUNDS	·									
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	l		H .			1	]				1

PAR 17-20.

S ( 10 300) { 81.00 Ž 3000 MONEY 1 REFERRED TO BUDGET BUREAU MG. 45-4261 REPORT-BUSHIP3-9291-4 0.05 3.0 1 ) 1 ١ **768** CENTER OF GRAVIT S LIN DINON REFERED TO FRAME NO. 1 3926 877.28 S LIN SHOW 74.01 60.4 28.0 51.00 77.43 10.23 46.56 110.0 54.55 52.00 54.00 13.43 54.00 7 2.43 \$4.00 400 32.0 54.0 PROMICE 64.0 60.0 80.08 3512358 1569 MOMENTS. U.S.S. 29.50 (...) (%) 65.94 23.80 00-12 27.00 18.00 0.0.81 17.50 94-00 00.0 36.00 21.00 21.50 40.00 36.00 32.0 0.12 31.5 26.0 \$ o 0.5 ADOVE BASE 0.12 147696 0001 3000 0000 800 13500 757 070 1053 3162 2327 282 840 WEIGHT (Pounds) 54.08 001 2900 3500 12000 2200 24000 5000 1950 ין.× 'גוא'נדג 24'x 9' x-r 150' X 8' X.J TOTALS, POUNDS TONS 672 FT x 0.79 Sog. Fr 7 0.7" 672 612 X1.3# 1760 X0.7" 76,432,41.3 441) DECK 100' 400 x 1.3" E. E. LIVING SPACE! ESTINATE OF VEIGHT FOR SHIPS, YORK SHEET MAYSHIPS 46164-2 (11-57) MESSESSIN ها دهر HN. DK ESSUIPH BUT FUE GALLEY JO CO ILZMOUGD OFIN ABOUT NOW STRUCT. BUDY OF CEL 101 141). 91-MN DK ~ DI LEIFL PACE. DESCRIPTION <u>R</u> TOP OF HSE m 20~ 1979 ò MSul-ATIEN 600 ~ To P SCOITIOOR ひむのた くりしゅんこう 02 DK N N LEVEL (JONI) SOBORY したりでし 6 ADDE 25 Furnishings 7 GROUP d 0 261776189 7 Ç 20 F182 ō VECT

P.

PAGE 18-2

ESTIMATE OF WEIGHT FOR SHIPS, WORK SKEET Bayships weigh.2 (11-57)

MOMENT'S 1521 9.00 <u>ء</u> ياريو 1/1 BATE REFERRED TO BUDGET BUREAU NO. 45-RZE! REPORT-BUSHIPS-9291-4 21.1 PORT 1 REFERRED TO FRAME NO. 17 (24) 434334 199 BOME 475 Ш ĭ 24.0 14.0 86.0 62.5 24.0 38.5 8 6 8-00 119-8 MOMENTS 8 U.S.S. 39.0 39.0 30.00 39.0 29.70 30.0 25.03 ADOVE BASE 80.5 15616 500 000 3126 WEIGHT (Pounds) (Fone) 1800 600 SE FLOOR - CANT'L FM. 15'22'XI' TOTALS, POUNDS 7 FLENITHIGS FR OFFICE, FIC OFF. CF CHART 4 RADIO PARCE OFFICE שאפפר אים אים 7 PAGE DESCRIPTION SCOITION PROJECT با بريم

MAR 19-20

ESTIMATE OF WEIGHT FOR SHIPS, WORK SHEET AAVSHIPS WOEK-2 (11-57)

		U.S.S.	S. PROMICE	1000		İ	BUDDET BUREAU NO. 45-718: Report-bush-ps-929:-4	.AU MO. 45-	R28:	סיננ	
	WE I GHT					CENTER OF	OF GRAVITY				
DESCRIPTION	(Founds)	ABOVE	MONENTS		REFERRED TO	O FRAME NO.	' -	REFE	REFERRED TO		
AD0171005.	- toward	BASE	E 1 11 2 11 2	7.00	MOMENTS	1.77	MOMENT S	PORT	MONEYES	81.80	LOS CHTS
6 200 P 600 (CONTO)											
CRENE RALL 600"108"	00377	2		l		6		1			
)	127.200					76.0					
)						2					
STERN ROLLER	25000	13.3				128.3					
2000 10 10 10 10 10 10 10 10 10 10 10 10			0,600,000				6,4,4				
1		21.80	1			3	1001	I		1	
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PAGE 6-3	95.09	21.80	2073			\$2.55	4997	١		1	
2-9	80.9	7	·	31.90	194					1.12	7
1-9	65.44	23.82	1563	E . E	3262			0.06	đ		
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•											
TOTALS, FOUNDS									-		
Stan 10.4 10.8	167.11	127.88	3823			5:25	ררפ			١	ĸ
Committee by		•			COMPUTING CHECKED			j			

ESTIMATE OF WEIGHT FOR SHIPS, WORK SHEET

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						CENTER	CENTER OF GRAVITY				
	*E.GH				REFERRED TO FRAME NO.	FRAME NO.		REF	REFERRED TO		
DESCRIPTION	(Tons)	ABOVE BASE	MOMENTS	380	SAN PROPE	1,10	MONENTS	1664	1 (A) FOR	94.16	upad 415
SUMMINARY OF ACCITIONS							·				
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001 91100	221.85	13.02	2889	15.53	340/					Š	53
	30801	4/8	430.65			34.56	40/6.3				
	1368	56 61	1297.70	4974	2060			7.25	725		
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500	12.77	12,94		76.09	16.1.36	١	5,0			١	4
600	167.11	22.88	3823			2,0	70				
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TOTALS, POUNDS								-			
	665/7	000/ 6	986688	26 7.65	80.269			0.76	603.5	_	
		1			21/21/40 (24/2/20)					ĺ	

SEACON

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REF. LINE FOR VERTICAL CENTERS IS \_\_\_\_\_\_ FEET ABOVE MOLDED BASELINE

REF. LINE FOR LONGITUDINAL CENTERS IS F. P.

公園(S 左右) - B B m S を B m S m S of C M S of C

ITEM		WEIGHT Tons	VERTICAL LEVER Feet	VERTICAL MOMENT Ft. tons	FWD LEVER Feet	FWD MOMENT Fr. tons	AFT LEVER Feet	AFT MOMENT Fr. tons
Tank top engine plating		<i>T</i> -	3.0	~ J ·	32.0	4.5.8		
Cleats		170.	15.5	L21.	138.25	16.23		
Bullwarkin wax of Chats		157.	15,83	2.22	141.15	19.76		
Bins		٦ ٢	7.0	1.75	2.06	5.15		
P, pe	{	.03	٥ -	.03	36.7	ن -		
Plat Porm		.23	<u>و</u> ي	2.07	23.0	5.29		
Door		<u>&gt;</u>	130	1.3	22.2	2.22		
Day fank		0 -	<u>ه</u> ن	8.	29.0	2.9	!	
		0	30.5	3.05	30.0	0. :		
Door		0	9.0	8-	127.0	12.7		
Ry Ise Floor		.57	28.0	96.51	1060	60.42		
Scuttle		70.	15.0	9.	256.0	10.0		
Posts		.33	32.0	60.6	4 (.0	13.53		
Eugines		4.82	ر ک	21.69	278	1098.96		
Chain		8.93	7.0	62.51	9	86.37		
			•					
To ta 1		16.024	7.94	127.2	87.37	1400.0		
			,					
NAVSEA 6290/8.12 (BEV 7.74) PAGE 12 /Exempt. NAVCHIPS 263 381	186 276 30							

NAVSEA 9280/6-12 (REV. 7-74) PAGE 12 (Formerly NAVXIIIPS 263-38)

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SEACON

FEET ABOVE MOLDED BASELINE 0 REF. LINE FOR VERTICAL CENTERS IS \_\_

REF. LINE FOR LONGITUDINAL CENTERS IS E.P.

ITEM		WEIGHT Tons	VERTICAL LEVER Feet	VERTICAL MOMENT Ft. tons	FWD LEVER Feet	FWD MOMENT Fr. rons	AFT LEVER Feet	AFT MOMENT Fr. tons
Rails		25.	25.8	13.416	32.0	h9·91		
Winch plate of supports		5.60	2594	145,3	T T. 05	246.6		
Cable trough		85.	30.3	1.91	26.75	₩.J.		
Fair leads		יל נ'	27.0	88.11	J.	6.16		
Frame for anchor	ĺ	2.25	81	40.5	12.0	27.0		
Rainhad Foundation (bow)		8 -1	25.13	4523	0.21	2.5.2		
Pair lead of Foundation (stern)		2.12	16.0	3392	260.0	2.135		
Doubler Plating		16.8	0.81	133 65	222.5	1982.5		
U in ches		20.54	29.83	612.7	41.0	842.14		
Wine		2.76	30.5	81.18	77	44.141	:	
Engines 12 V-71		1.4 C	۲. ۶	<u>o</u> ø.	228	10032		
Diesel Exhaust + runk		.30	47.0	<u>-</u> <u>-</u> . –	099	(A. &		
Cleats		.20	15.5	3. (	141.15	78.5		
Platform		٧٢.	<u>م</u>	2.07	0.7.0	3.9 -		
Door		0 -	13.0	<u>~</u>	15.2	1.52		
Day Hank		92.	,T O	2.70	29.0	7.54		
False Floor		11.	28.0	3.08	112.0	12.32		
Door		01,	315	3.15	110.0	11.0		

NAVSEA 9290/6-12 (REV. 7-74) PAGE 12 (Formerly NAVSHIPS 263-38)



SEACON

AEF. LINE FOR VERTICAL CENTERS IS

REF. LINE FOR LONGITUDINAL CENTERS IS F.D.

WEIGHTO & DISTRICT TO THE PROPERTY OF THE PROP

FEET ABOVE MOLDED BASELINE

17.00

ITEM		WEIGHT	VERTICAL LEVER Feet	VERTICAL MOMENT Fr. tons	FWD LEVER <i>Feet</i>	FWD MOMENT Ft. tons	AFT LEVER Feet	AFT MOMENT Ft. tons
Relorus Stands		70.	38.0	2.66	4(4.0	3.08		
Ven+		<u>5</u>	2.0	5	194.0	2		
Spill boxes		77.	16.5	7.76	130.0	161.1	;	
Wal Kway		1,0.	8.0	٠. ٢	28.0	1.12		
Misk. Structure	ĺ	2.84	10.2	28:17	20002	268.7		
Total		54.69	22.43	1226.7	101.92	5574.0		
		   	•					



SEACON

FEET ABOVE MOLDED BASELINE MEF, LINE FOR VERTICAL CENTERS IS \_\_\_

REF. LINE FOR LONGITUDINAL CENTERS IS F. P.

A MEIGNETO CONTONINE I WARE STATE TRANS

CASO TOTAL

ITEM		WEIGHT Tons	VERTICAL LEVER Feet	VERTICAL MOMENT Ft. tons	FWD LEVER <i>Feet</i>	FWD MOMENT Ft. tons	AFT LEVER Feet	AFT MOMENT Ft. tons
TOTAL WEIGHT TO REMOVE		16.024	794	127.2	28737	0.0071		
TOTAL WEIGHT TO ADD		54.69	22.43	122.67	101.92	5574.0	<u> </u> 	
TOTAL	ĺ	38.67	28.43	1097.4	167.94	4174.0		
-			•					
NAVSEA 9290/8-12 (REV. 7-74) PAGE 12 (Formerly NAVSHIPS 263-38)	PS 263-38)							

	TR ON OF VESSEL:	RIM & STA	ABILITY		Y	DATE:_	PAG	E:
CARGO _	Z CONSUMABLES		<b>%</b> BA	LLAST		BY:	JOB	NO
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l <b>i</b>	AP 27 23	<u>.</u>	-		14		# 4 +	/i
_			X X					•
REF LIN	E FOR V.C.G.	<u>-</u>		REF LIN	E FOR L.C.	·	·	· ];
SYMBOL	COMPARTMENT	CU FT TON	WEIGHT TONS	V.C.G. ADV.B.L FT.	MOMENT ADV.BL FT TONS	LCG ABT.FP FT	MOMENT ABT. EP FT TONS	VERT.MOM OF F.S. FT TONS
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í	TO ALTER TRIM 1" =				OF GRAVITY			
LCB AFT			1		TRIC HEIGH			J •
LCG AFT			1	GM CORE	ICE FOR FRE	L SUKTAU	,c =	
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	TFP = AP #		* 1					;
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